

Academic discourse of online civic networking:
Moving towards a more critical perspective of technology
Tracy Lacroix-Wilson

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Abstract

This work examines the academic discourse of online civic networking. The thesis supports that the majority of recent published work is derived from dominant epistemic assumptions about technology, which lack a critical perspective. Technology is commonly understood as either an impartial device facilitating human tasks and therefore progressing society, or as a significant element determining the circumstances for social change. While being careful not to discount the heuristic value of most research on civic networking in cyberspace, it is argued that a more critical perspective of technology fosters insightful and original thought concerning democratic citizenship today. Using Andrew Feenberg's critical theory of technology to inform this work, scholars are encouraged to move towards this perspective of technology in future analyses of technologically mediated practices of democratic citizenship.

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Introduction

Technologically mediated practices of democratic citizenship have recently captured the widespread attention of scholars, politicians and journalists. It is rare, however, to seek out information on practices of this nature without encountering descriptions of at least one of the following political events: the tri-continental resistance to the North American Free Trade Agreement; the Zapatistas' rebellion against the Mexican government; the international lobby against the Multilateral Agreement on Investment; and, the large-scale demonstrations opposing the Third Ministerial Meeting of the World Trade Organization in Seattle, Washington. These seemingly watershed moments, not only represent turning points for these practices of citizenship in online environments, but also frame the academic discourse of civic networking in cyberspace.

In 1991, shortly after the implementation of the Canada-U.S. Free Trade Agreement, then President George H.W. Bush sought to establish a North American Free Trade Agreement (NAFTA) with Canada and Mexico. Designed to provide North America with a competitive advantage over Europe and Asia, the tri-continental agreement advocated the freer movement of goods, services and investment. While the Bush administration did not witness the ratification of the agreement, the Clinton administration did. Then President Bill Clinton undertook Bush Senior's efforts to implement the NAFTA almost immediately after his election into office in 1993. Signed by representatives from all three countries in 1992, ratified in 1993 and put into effect on January 1st 1994, this agreement transformed North America into the largest free trade area in the world.

For its proponents, the NAFTA held many promises relating to economic growth, including raising the standard of living for citizens in all three countries. A minority of informed citizens from Canada, the U.S. and Mexico perceived it quite differently, however. They met the NAFTA with considerable resistance both during and after the process of its negotiation due to concerns over its potential effect on national sovereignty, labour, the environment and human rights, among other concerns. The NAFTA was criticized for “abolishing the rights of citizens and governments to control the entry, conditions, behaviour and operations of transnational corporations in their country” (Barlow and Clarke, 1997, p.1). The 2000 page deal was also criticized because its negotiation took place behind closed doors. Subject neither to grassroots discussion nor to public debate, the NAFTA was considered an undemocratic tool of economic neo-liberalism. It took little time for it to become a target of dissent for existing anti-free trade networks in Canada that previously opposed the Free Trade Agreement.¹ In an effort to resist the NAFTA, “[Canadian anti-free trade networks] built on links with popular sector groups in Mexico and later the United States to develop a tri-national network of resistance to the NAFTA agenda” (Huyer, 2001, p. 301). While the valiant efforts of this network did not prevent the NAFTA’s ratification, they succeeded in capturing the attention of active citizens groups. The tri-national network spread pertinent information concerning the consequences of neo-liberal agreements like the NAFTA and, more importantly for my purposes, exemplified how the Internet could be used to facilitate the activities of citizens in civil society.

¹ Anti-free trade coalitions, including the National Action Committee on the Status of Women, Pro-Canada Network and Common Frontiers-Canada, were amongst these groups.

Although most groups opposing the NAFTA preferred to network with one another via telephone and fax, some began to employ cyberspace to facilitate network building. Mexican anti-free trade networks, including Red Mexicana, employed information and communication technologies to communicate and organize its efforts with their American counterparts (Huyer, 2001). It began with the rental of a long-distance line called “Telepac,” which was used to access Peacenet in the U.S. Since the Internet had not yet been developed as it is today, this network was used to perform modest electronic networking functions. Peacenet was used to send and receive emails, post information and host conferences. As both access to, and the quality of network technology improved, a local server was set up in Mexico and the Mexican node of the Association for Progressive Communication—LaNeta—was developed (Martinez-Torres, 2001). It supported a much larger number of users and allowed Mexican anti-free trade groups to coalesce more effectively with the U.S. and Canada for approximately one year. The Internet began to be used in 1993, when a full connection was established (Smith, 1999). It became a relatively quick and inexpensive means of disseminating information. In Mexico, “a very important factor for the use of the Internet was the opportunity it presented to generate alternative information, thereby overcoming government control of the media” (Huyer, 2002, p. 306). Despite its limited use by active citizen groups resisting the NAFTA, the Internet’s potential for civic networks began to be recognized and optimism developed. Some of the early benefits of this technology revolved around the fact that it was a relatively inexpensive way to connect with others, it transcended time and space, and was not controlled by the state. The popularity of the

Internet for civic networking, however, exploded with the rebellion launched by the Zapatista Army of National Liberation (EZLN) against the Mexican government.

Indigenous communities in Chiapas have long struggled with the Mexican government over developmental issues and human rights. After the ratification of the NAFTA however, the dynamics of this ongoing struggle shifted dramatically. The Mexican government's entry into the NAFTA guaranteed further loss of control over their land and respective futures for the inhabitants of Chiapas. Indigenous communities heralded the agreement as "a death sentence for Indians" (Weinberg, 2000). This situation led the EZLN, an army supported by a grassroots organization composed primarily of the indigenous peoples from the Lacandon region, to storm onto the political scene.

On New Year's Eve, in 1994, "the [EZLN] started its occupation of several towns in the impoverished state of Chiapas" (O'Neil, 2002, p. 326). Following their overt revolt against the government, the Zapatistas forwarded several demands revolving generally around work, land, shelter, food, health, education, independence, freedom, democracy, justice and peace. When they were not met, the Zapatistas reached out to different sectors of Mexican civil society and transnational social movements for support.

Benefiting from the experience of Mexican anti-free trade networks and with the help of local and global technologically equipped supporters, the Zapatistas employed the Internet to fortify their movement. This occurred in several ways. The Internet aided the Zapatistas to bypass the filters of the mainstream media. They also used it to access pertinent information to help them build their case against the government. Furthermore,

they built a communicative network. In “The Zapatistas Online” (2001b) Adrienne Russell remarks:

Computer mediated communication (CMC) certainly strengthened the movement by facilitating communication first among members of the movement and its supporters; second, among members of the network and EZLN supporters worldwide; and third, among the Zapatista network and those who support sympathetic but officially unrelated causes. (p. 411)

The results of what is termed “the first ‘cyber’ or ‘Net’ war” (Vidal, 1999) were considered revolutionary. Harry Cleaver suggests that the Zapatistas and their supporters had woven a new “electronic fabric of struggle” to carry revolution round the world (1997). Richard Stahler-Sholk notes, “the rebellion launched by the [EZLN]...is best understood not as a guerilla struggle for state power, but rather a social movement resisting the dominant mode of globalization being imposed from above” (2001, p. 493). Not only did this social movement reach various grassroots activists across the globe, but it also perpetuated a large-scale demonstration in Mexico City in 1996. A few months later, the Zapatistas hosted the first intercontinental encounter for humanity against neo-liberalism in Chiapas. These demonstrations brought international awareness to the consequences of neo-liberal policies, encouraged resistance to such policies, and led to ongoing negotiations between the Zapatistas and the Mexican government over the rights of indigenous peoples in Chiapas.

The Chiapas events gained widespread attention from reporters and scholars alike (see Cleaver, 1997; Ronfeldt et al.1998; Vidal, 1999; Robinson, 2000; Martinez-Torres, 2001; Russell, 2001; Stahler-Sholk, 2001; O’Neil, 2003). The relative success of the

Zapatistas was interpreted as going a step further than mere promotion of the Internet as a useful tool for civic networking. Scholars, politicians and journalists considered how “...transnational social movements, made possible in part by the Internet, remain one of the few areas where significant counter-hegemonic power might be developed and exercised” (Martinez-Torres, 2001, p. 348). Simply put, they were building hope for the notion of a global civil society fostered by technology. Despite the overtly local nature of the Zapatistas’ rebellion against the Mexican government, the events surrounding this case demonstrated the global and local effects of civic networking online. This contributed to the shape of the discourse, which became increasingly more optimistic in nature.

The previous two watershed moments contributed to the third event structuring the discourse of online civic networking. Soon after the ratification of the NAFTA and the Zapatista’s rebellion, representatives from twenty-nine of the world’s richest and most developed countries assembled in Paris to discuss prospects of a global investment regime. As members of the Organisation for Economic Cooperation and Development (OECD), they initiated negotiations of a Multilateral Agreement on Investment (MAI).² Negotiations persisted until the latter part of the decade, at which point a draft of the agreement was prepared for ratification.

As a major tool of economic globalization, the MAI sought to control state policies regulating the flow of private foreign direct investment in developing markets.

² These members include Australia, Austria, Belgium, Canada, Czech Republic, Denmark, England, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxemburg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey and the United States.

Its strategy included the placement of “additional limits on the freedom of signatory governments to impose or maintain restrictions on such flows” (Henderson, 1999, p. x). In this sense, the primary goal of the MAI was to improve the investment provisions of the NAFTA by intensifying them and using them to the advantage of transnational corporations across international borders. The MAI was also negotiated behind closed doors, leaving the global public out of the decision-making process.

In January of 1997, the OECD began circulating a confidential draft of the MAI. Shortly after, a copy of the draft was obtained and leaked to the public. Its dissemination was the combined effort of a small number of non-governmental advocacy organizations (NGOs) deeply committed to safeguarding human rights, working in the interest of democratic order and protecting the environment. NGO’s including the Third World Network and the Council of Canadians worked around the clock to make the OECD’s plan known worldwide. This was done using both traditional and new media. The draft was first released on the front page of Canada’s *Globe and Mail* on April 3rd, 1997. The Canadian Centre for Policy Alternatives later published the document under the title, *The Corporate Rule Treaty* (Clark & Barlow, 1997, p. 3). While these methods were useful, it is widely held that “the publication of this treaty over the Internet ... explains how militant organizations and associations throughout the world were alerted” (Lemire, 2001, p. 318). Nick Maybe asserts:

The Internet enabled groups who could actively follow and analyze the MAI negotiations to disseminate information to a global audience, and helped NGOs with fewer resources ... collect up-to-the-minute material with which to lobby and inform their own governments, public and media. (2000, p. 61)

Active citizens employed the Internet, not only to disseminate pertinent information about the MAI to the broader public, but also to mobilize large-scale resistance to it. This was achieved through various avenues, including: websites, online newsgroups, list serves and discussions in online communities. A much-publicized international campaign ensued against the MAI shortly thereafter.

In March of 1998, the MAI was removed from the OECD's agenda. While further attempts to develop a similar investment regime remain an open possibility, the MAI was temporarily discarded in the context of the given international forum.³ That its ratification was not successful may be attributed generally to two overlapping factors. The first involves complications arising in the negotiation process. Representatives of the OECD's member governments experienced difficulty reaching consensus because "the range of topics proved too wide, and the initial goals too ambitious" (Henderson, 1999, p. x). This factor led some to experience insecurity regarding bargaining positions and general trepidation throughout the course of the negotiations. The second factor is the escalating international resistance to the MAI. Civic unrest followed soon after the draft text began to circulate publicly, placing additional pressure on representatives relating to their bargaining positions. The combination of both factors accounted not only for several delays in the preparation of the MAI for ratification, but also impacted the French government's eventual decision to withdraw from it altogether.

Since the OECD's failure to negotiate the MAI, the success of the international campaign is largely attributed to the actions of dissident detractors in cyberspace. Several

³ Such possibilities have been discussed in the context of the World Trade Organization.

scholars, politicians and journalists have argued that civic networking online actually enabled the transnational social movement (see Smith and Smythe, 1999; Dymond, 1999; Ayers, 1999). It was immediately considered another turning point for the practice of civic networking in cyberspace. Ronald Deibert remarks, “the case of the MAI offers an instructive example of how the Internet has boosted the responsiveness and capacities of civil society networks” (2002, p. 102). Stephen Kobrin subsequently notes, “the story of the MAI is cautionary tale about the impact of an electronically networked global civil society” (1998, p. 99). Kelly O’Neil adds to these sentiments in “Web Sites of Resistance: Internetworking and Civil Society” (2002). She states, “anti-MAI cyber-activism provided governments and corporate interests with ample evidence of the growing sophistication of many civil society organizations around international trade and development issues” (Kelly, 2002, p. 327). The employment of the Internet by active citizens opposing the MAI propelled the discourse concerning its ability as a tool to subvert neo-liberal investment regimes on a global scale. This was the first successful global campaign mediated by the use of technology. The practice of civic networking in cyberspace had evolved significantly since the early anti-NAFTA efforts.

The fourth and final structuring event occurred approximately one year after the dismissal of the MAI from the OECD’s agenda. Dissident citizens employed the Internet once again to resist neo-liberal trade policies at the Third Ministerial Meeting of the World Trade Organization (WTO) in Seattle, Washington. The purpose of the meeting was to “launch a new round of multilateral trade negotiations, in succession to the Uruguay Round which had ended seven years before” (Bayne, 2000, p. 132). Designed to create an opportunity for nations to harness benefits of globalization by removing barriers

of international competition, this “Millennium Round” also sought to negotiate an agreement resembling the MAI. The meeting, scheduled from November 30th to December 3rd of 1999, was seriously disrupted by massive demonstrations.

Protesters began organizing several months in advance with the help of the Internet. They used the technology in three central ways. First, in the widespread use of mailing lists by NGOs, including Friends of the Earth and Public Citizen, to help distribute information concerning the meeting and petitions against it (Lemire, 2001). The second was the direct use of email by citizens opposing the Millennium Round. Not only were emails used to coordinate actual demonstrations, but also to disrupt the activities of local authorities. The third Internet tactic was the use of “cyber-hacktivism” (Vegh, 2003). Dissident citizens employed the Internet to block access to official sites and alter their content.

On the first day of the meeting, approximately 30,000 grassroots activists joined forces from various parts of the world to resist the neo-liberal policies that the WTO sought to impose upon them without their consent. These policies affected human rights, labour rights, health care, education, the environment and the general standard of living for citizens in numerous countries.

The efforts of intercontinental grassroots networks helped not only to shut down the meetings, but also bring further attention to spreading global opposition to neo-liberal policies. This is often attributed to “the enactment of forms of activism adapted to the new wired society...[including] new forms of participatory democracy” (DeLuca and Peeples, 2002). Not only did the protesters avowedly discuss their use of the Internet to facilitate their activities, but were also seen in television coverage broadcasts around the

world using Palm Pilots and hand-held wireless computers connected to the Internet. These technological means were used to direct others in the streets surrounding the venue of the meeting. In quite a similar way to the international lobby against the MAI, “it is often argued that the Internet played a key role in the galvanizing of protesters and in the organization of the protests themselves” (Van Rooy, 2000). Matthew Eagleton-Pierce notes, in “The Internet and the Seattle WTO Protests”, that “this triumphant moment in modern popular protests... marked an important watershed for Internet-mediated activism” (Eagleton-Pierce, 2001, p. 331). The importance placed on practices of civic networking in cyberspace, by scholars, politicians and journalists heightened after this event. It proved to be another successful example of a global campaign mediated by the use of technology.

These four events each contribute to a growing optimism regarding the Internet’s ability to facilitate the activities of democratic citizens in civil society. They are used in contemporary literature as examples of the remarkable success of civic networking in cyberspace. Anti-free trade networks opposing the NAFTA serve to demonstrate the convenience of Internet use for civic networking. As a result of this case, the Internet is considered to be the most rapid and cost effective tool for the dissemination of information to NGOs and their organization tri-nationally. The Zapatistas’ cyber war highlights the Internet’s ability to magnify a grassroots movement at the community level by affording it a global reach. Civic networking in cyberspace is thought to have enabled the EZLN to make their voices heard and to coalesce with sympathetic supporters worldwide. The international lobby against the MAI illustrates how the Internet can be used to bring common concerns of citizens to the forefront of global politics via civic

networking in cyberspace. This case boasts of the power of united NGOs to undercut national governments and international agreements with the help of technology. In other words, it is demonstrative of the abilities of citizens to access confidential data in the “information age” and affect major economic negotiations. The demonstrations at the Third Ministerial Meeting of the WTO are used to illustrate the very physical effects of civic networking in cyberspace. Not only can technology bring citizens together in cyberspace, but also unite them in the streets with the intent of challenging oppressive regimes. These events are used by commentators to forward the notion of technology as a catalyst for social progress through political activism.

It is striking that information technologies are being increasingly employed to facilitate democratic citizenship; civic networking in cyberspace is a case in point. If this practice is as significant a practice to contemporary democratic citizenship as is claimed, this raises issues over its treatment in contemporary literature. Specifically, how do current analyses of online civic networking fuel contemporary understandings of democratic citizenship?

An obvious problem rests in overly optimistic assessments of technology for mediated practices of participatory democracy. It would seem that those who comment on the aforementioned events, and on similar events that have since taken place, consider technology in utopian terms. Use of the Internet is understood to be a major contributing factor to the relative successes of civic networking in such cases. This heightens the general importance of civic networking in cyberspace for active citizens and causes scholars, politicians and journalists to lose sight of some of the actual implications of the practice.

The view of the Internet held by the majority of those who discuss civic networking in cyberspace is linked to dominant epistemic assumptions about technological objects. Technology is commonly perceived as an impartial device facilitating human tasks and therefore progressing society. Unfortunately, this perception is somewhat blind to the reality that technological designs are not neutral, that technological objects are attributed social meaning by their users and that some of these come to be appropriated in alternative ways by users. What I mean to say here is simply that the role of technology is not as clear-cut as it is often framed in this discourse. Consequently, using the Internet to facilitate democratic practices of citizenship like civic networking is significantly more complicated than has been recognized in a majority of the literature.

In order to escape dominant epistemic assumptions encapsulating technological objects, a critical focus is needed. Consequently, my thesis advocates a critical approach to technology be inserted. Using Andrew Feenberg's critical philosophy of technology to inform the claims, I argue that network technologies need to be examined more critically in analyses related to civic networking in cyberspace. Only when technology is understood more complexly will scholars, politicians and journalists form a better understanding of online democratic practices of citizenship in the 21st century.

I begin in chapter one by examining the longstanding practice of civic networking in democratic societies in general. Through a brief survey of contemporary political theory, I characterize civic networking and situate it as a cluster of central and relevant practices of democratic citizens occurring in civil society.

In chapter two I focus specifically on the practices of civic networking in cyberspace. By tracing the evolution of network technology, I examine how civic networking came to exist online. I then analyze the body of literature exploring civic networking in cyberspace. I identify dominant schools of thought regarding technology in works related to civic networking, drawing attention to the knowledge gap growing out of a collective scholarly failure to approach technology more critically.

Chapter three turns to the work of Andrew Feenberg. I provide a robust treatment of the thinker's major ideas in order to outline a more critical theory of technology. By grappling with such issues as the hermeneutic dimensions of technological objects, Feenberg's critical theory of technology promotes a different understanding of technology that may be applied to civic networking in cyberspace.⁴ I attempt to mobilize his theory discussing how it might be used as an alternative lens through which to examine these practices.

The fourth and final chapter scrutinizes the limited literature on civic networking in cyberspace taking a more critical perspective. Considering Feenberg's critical theory of technology, I analyze this literature's strengths and its shortcomings. From this engagement, I suggest that we can move towards a more complex articulation of what it means to practice civic networking in an online environment. My purpose is to aid scholars, politicians and journalists to consider the relationship between technology and citizenship in broader terms.

⁴ These hermeneutic dimensions include the specific ends designed to be achieved by technological objects and the alternative appropriations of them that come to be normalized by their users.

Chapter 1: Civic Networking as a Central Democratic Practice in Civil Society

Although contemporary citizenship is understood to be incredibly flexible and multifaceted, a large part of it revolves around identity, legal status and active participation in the political affairs of the state. Practices, especially in democratic societies, are a crucial aspect of citizenship. One scholar remarks that citizenship may be generally defined as a “practice or something one acquires by defending his or her own rights” (Bresser-Pereira, 2002, p.146). If this is the case, the study of recent social movements and their related activities, including civic networking in cyberspace, contributes to a more solid grounding of citizenship today.

Prior to turning my focus to civic networking in cyberspace, it is necessary to examine what I mean by “civic networking”. Although the concept is employed frequently in academic and political discussions, several definitions circulate. I examine these definitions in relation to, and emerging out of, recent political thought.

Civic networking has many identifiable characteristics. Some scholars suggest that it is inherently political (Warkentin, 2001); it encompasses collective activity (Putnam, 2000); it involves the ever-changing practices of democratic citizens (Taylor, 1998; Norris, 2002); it revolves around distribution of power (Tarrow, 1994; Dalton and Kuechler, 1990); and, it includes a concerted effort to effect change (McAdam et al., 1996). While these characteristics are not inaccurate, they cover only basic elements of the greater practice. I explore civic networking as a central practice of democratic citizens that occurs in civil society. The current chapter maps the route to this definition of civic networking, expanding upon it and developing it.

The first section provides a general discussion of civic networking. I examine it as a concept in recent political thought and demonstrate the different ways in which it is discussed. The second section examines civil society and its relationship to civic networking. In the third section of the chapter, I turn my focus to democratic practices. By exploring significant democratic values and norms derived from current political literature, I situate civic networking as significant democratic practices of civil society. The fourth section explores the relevance of this practice in democratic societies. That is, how it affects both citizens and politicians in modern democratic states.

“Civic networking” as a Concept in Recent Political Thought

“Civic networking” is discussed with a great deal of imprecision in contemporary political literature and within modern global politics. It is a significant, albeit difficult, concept containing multiple classifications. By briefly exploring some of these, I demonstrate different ways in which civic networking is currently identified by scholars. I explore in this section: 1) how the actions of democratic citizens in various social groups come to be labeled as civic networking; 2) the manner in which civic networking is constantly changing within these groups; 3) the practice’s transformation throughout the history of Western democratic societies; and 4) working definitions of civic networking developed by scholars and politicians within a specific context.

Civic networking is identified in literature as a practice used to sustain the interpersonal relationships of citizens within the context of various socio-political groupings. Some of these, for example, include traditional interest groups, new social

movements and transnational advocacy networks. By differentiating between them, I hope to detail some of the various characterizations of civic networking.

Traditional interest groups developed alongside the rise of democratic government in early industrial societies. Their general purpose was not only to support their members but also to influence political decision-makers using “accepted channels of communication and orthodox means of bargaining” (Wilson, 1973, p. 11). Traditional interest groups have several unique characteristics. They are, for instance, political collectivities with deeply rooted bureaucratic systems containing an official membership and a specific common goal. Examples of these collectivities range from trade unions to professional organizations (Norris, 2002). Traditional interest groups stand out from other political collectivities because their activities are standardized and institutionalized. Their moves are extremely calculated and a great deal of planning goes into them. Civic networking enters the equation as these groups develop strategies for political action. It may be said to occur in these collectivities in relation to the ways in which citizens interact with one another to arrive at their respective commonly desired goals. While traditional interest groups still exist in modern democratic societies, such as the National Association for the Advancement of Colored People in the United States, their popularity has diminished considerably as a form of political engagement in the post-war era (see Putnam, 2000; Clarke and Rempel, 1997). Nevertheless, traditional interest groups represent an important political collectivity wherein contemporary democratic citizens practice civic networking.

The 1960s witnessed the emergence of new social movements. Taking off with the student movement that swept across Western democratic societies in the United

States, France and Germany, the period experienced “the beginning of a broader wave of social change that has affected virtually all advanced industrial democracies” (Dalton and Kuechler, 1990, p.1). Citizens concerned themselves with a host of new political issues that were brought about by modernization.⁵ These included perceived social injustices, civil rights, and oppressive social, political and economic forces. The concerns of citizens were and continue to be made up of much broader facets of society than those of traditional interest groups. They differ significantly from traditional interest groups in that new social movements are “a conscious, collective, organized attempt to bring about or resist *large-scale change* in the social order by non-institutionalized means” (Wilson, 1973, p. 8) (emphasis added).⁶ Moreover, this collectivity is considered ephemeral in relation to traditional interest groups. Citizens engage in a more participatory style of political engagement that draws on the ideology of the New Left and the alternative political protest tactics of the student movement. Civic networking occurs in this collectivity, not only in the initial organization of like-minded citizens, but also in the development of their strategies and tactics for action.

Transnational advocacy networks are an important subset of new social movements. These collectivities are an alternative trend in civic engagement emerging out of the increasingly globalized socio-political climate (Chatfield, 1997). Transnational

⁵ Modernization is defined as “a process of social change resulting from the diffusion and adoption of the characteristics of expansive and apparently more advanced societies through societies which are apparently less advanced. Modernization involves social mobilization, the growth of a more effective and centralized apparatus of political and social control, acceptance of scientific rational norms and the transformation of social relations” (Johnson et al., 2002, p. 516).

⁶ These non-institutionalized means include large-scale demonstrations, street protests, sit-ins, etc.

advocacy networks are typified “by direct–action strategies and Internet communications, loose coalitions, relatively flat organizational structures, and more informal modes of belonging focused on shared concern about diverse issues and identity politics” (Norris, 2002, p. 190). Citizens associated with transnational advocacy networks practice civic networking in a similar way to those in new social movements. However, they are also considered to partake in another aspect of civic networking: the cross connection of networks with one another. If transnational networks can be considered the organization of smaller networks within larger networks, civic networking includes the linking of various networks with one another. This kind of collectivity is capable of producing large-scale international social movements.

Recent decades have witnessed the dramatic evolution of civic engagement in advanced Western industrial democracies (Polletta, 2002). Channels for political activism have changed considerably in terms of their qualitative and quantitative characteristics (McAdam et al., 1996; Tarrow, 1994). Not only have they taken on different forms and altered their modes of expression but also have modified their political motives (Dalton and Kuechler, 1990). They have strayed from conventional structured forms of expression, which influence political decisions about specific issues, and moved toward alternative amorphous forms of expression that challenge the oppressive hegemonic forces in modern democratic societies. The “Carnival Against Capitalism” at the Summit of the Americas in Quebec City illustrates some of the major differences between citizen action groups at the turn of the 20th century and those at the turn of the 21st century (see McNally, 2001). Traditional interest groups predominantly characterize the former while new social movements and transnational advocacy networks distinguish the latter.

Although both constitute forms of civic networking, the manner in which they are practiced has evolved considerably in recent decades and continues to change. As a result, the parameters of the civic networking have become incredibly blurred. This has led scholars and politicians to recently characterize practices of civic networking in a number of ways.

“Civic networking” is used to signify various related acts to the collective political organization of democratic citizens. These acts vary considerably. One scholar may classify an attempt to motivate collective action as civic networking while another may employ the term to describe the mobilization of dissident citizens (McAdam et al., 1996). Concomitantly, it is not clear whether the practice itself ought to be understood as being extremely broad in focus, or whether it is very specific. Does it, for instance, include the process of establishing an organizational infrastructure for civic action or rather is it a phenomenon that takes place within existing civil organizations? A prevalent thought in current political literature is that civic networking is a multilayered practice of democratic citizens that includes all of the above.

A recent trend in defining civic networking in political literature is for scholars to provide precise definitions of civic networking relating to their specific case studies. One such example is found in Barbara and Terrance Carroll’s “Civic Networks, Legitimacy and the Policy Process” (1999). Their article examines the policy process in the Republic of Mauritius. The authors argue that its legitimacy is based on its response to society as a whole, including ethically based social groups. They define the practice of civic networking therein as follows:

We distinguish the civic network from the traditional idea of civil society

by defining it as a broad version of civil society which specifically includes ethnic organizations. The consultative link between this broad civil society and government is what turns this interaction into a process which can help to build legitimacy, and improve policy capacity. (Carroll and Carroll, 1999, p. 2)

For these authors, civic networking consists of the interactivity between Mauritian officials and multicultural grassroots organizations. Its purpose is primarily to legitimize the policy process in the state. Although this sort of characterization is neither necessarily accurate nor inaccurate, it has a tendency to reduce the boundaries of practice and lead to a misunderstanding concerning its broader significance for democratic citizens. Nevertheless, it constitutes another way in which the practice of civic networking has come to be understood.

While I do not attempt to provide a universal definition of civic networking, I suggest there are certain elements that characterize it. It must account for how democratic citizens act in and through the capacities of various social groups. Civic networking is a set of actions that change continuously within these groups. The purpose of the practice is to affect the outcome of political decisions and given situations. Finally, it is the primary means through which civil society is produced.

Civil Society and its Relationship to Civic Networking

Civil society and civic networking are mutually constituting. In other words, civil society is so deeply embedded in civic networking and vice-versa that each perpetuates

the other. In this section, I explore how different understandings of civil society shape interpretations of civic networking.

While civil society is a challenging term to define, it contains several indisputable elements. For instance, it includes space(s) of struggle wherein the activities of voluntary social networks counter balance those of the state. Numerous contemporary scholars demarcate the boundaries of civil society in terms of space. Salvador Giner suggests, in “Civil Society and its Future,”

Civil society is a historically evolved sphere of individual rights, freedoms, and voluntary associations whose politically undisturbed competition with each other in the pursuit of their respective private concerns, interests, preferences and intentions is guaranteed by a public institution called the state. (1995, p. 304)

In this capacity, civil society is confined to the realm of a given social space in the context of a nation state. John Ehrenberg adds that this given space exceeds the Habermasian notion of public sphere (1999). He suggests specifically, in *Civil Society: The Critical History of an Idea*, civil society “delineates a sphere that is formerly distinct from the body of politic and state authority on one hand, and from the immediate pursuit of self-interest and the imperatives of the market on the other” (Ehrenberg, 1999, p. 235).

Simply put, it encompasses a grey zone linking the public and the private sphericules of a democratic nation state.⁷

Another indisputable element of civil society includes its composition of voluntary social networks. Michael Walzer suggests that it constitutes “a space of uncoerced human association and also the set of relational networks—formed for the sake of family, faith, interest, and ideology—that fill this space” (1991, p. 293). Keith Tester expresses a similar view in *Civil Society* (1992). According to him, civil society consists of “social relationships, which involve the voluntary association and participation of individuals acting within their private capacities” (Tester, 1992, p. 8). Therefore, civil society finds its strength in its “self-constituting collective actors” (Cohen and Arato 1992, p. xviii).

Civil society functions indisputably as a watchdog for the activities of democratic nation states. Certain scholars assume that democratic states would erode into despotic dictatorships without it. Ernest Gellner remarks, in *Conditions of Liberty: Civil Society and its Rivals*, civil society is comprised of

...that set of diverse non-governmental institutions which is strong enough to counter balance the state and, while not preventing the state from fulfilling its role of keeper of the peace and arbitrator between major interests, can nevertheless prevent it from dominating and atomizing the rest of society. (1994, p. 5)

⁷ The notion that there exists public sphericules, in relation to Habermas’ public sphere, derives from the work of Todd Gitlin (1998). He remarks, “the diffusion of interactive technologies surely enriches the possibilities for a plurality of publics—for the development of distinct groups organized around affinity and interest” (Gitlin, 1998, p. 173). Gitlin’s notion may be linked with Nancy Fraser’s conception of subaltern counter publics (see Fraser, 1993).

In other words, civil society arises from the organized and autonomous activities of citizens occurring beyond the realm of state and market activity, without inhibiting the role of state. John Hall adds, in “Nature of Civil Society”, that it involves “a form of societal self-organization which allows for co-operation with the state whilst enabling individualism” (1998, p. 32).

Several aspects of civil society may be agreed upon through the writing of these scholars. Civil society is a contested social space found in every democratic society. It encompasses the voluntary relationships of citizens whose networking enables them to police the state’s conduct. Citizens who partake in civil society also attempt to provide an even distribution of power in democratic capitalist nation states. Obviously then, civil society has an intimate relationship with civic networking.

Scholarly assessments of civil society can usefully inform discussions of civic networking. A civic network therefore is a channel of voluntary citizen involvement that emerges as means of producing and sustaining civil society. Specifically, it consists of an autonomous advocacy group, or non-government advocacy organization, that develops in an attempt to bring awareness to perceived social injustice and effect progressive reform. Within the context of this work, progressive reform constitutes any attempt at social reform that is perceived by a civil society network to benefit the greatest number of citizens either nationally or internationally. In broader terms, civic networking is the various collective active engagements of democratic citizens in civil society. More specifically, it includes the intricate association of active, previously unacquainted, participants who form social relationships by associating, coalescing, negotiating, and engaging in struggle with the intent to change a given socio-political situation in a civil

atmosphere. The practice encompasses both the establishment of organizational infrastructures for civic action and the temporary associations of previously separate networks intended to progress society as a whole.

Foundations of Civic Networking in Democratic Societies

Civic networking is a central practice of democratic citizens and may be labeled such because the practice reflects and reproduces key values, facts and norms that are found in every democratic society. In this section, I identify how these foundations are ingrained into civic networking. The values, facts and norms specified below are derived from recent political theoretical thought concerning democratic citizenship. While literature concerning this thought does not frame them specifically in terms of civic networking, they are organized as such in order to make visible the ideological element of civic networking.

Democratic values are essentially how citizens come to define themselves in relation to their rights and obligations within a political collectivity. They guide how citizens behave in the sense that they act as mental frameworks that can motivate certain actions and reactions. These values perpetuate norms that are relevant to the practice of civic networking. They are generated and negotiated to help democratic citizens cope with their perceived environments.

Citizens inhabiting modern democratic societies tend to hold certain core values. According to contemporary political theoretical literature, they revolve chiefly around: civic virtue, liberty, and equality. While this is a narrow list, it is important to understand that these values serve as rubrics for more articulated values. Thomas Spragens explains,

in *Civic Liberalism: Reflections on our Democratic Ideals*, that he includes “under the heading of ‘subterranean’ values: respect inhuman dignity, belief in the efficacy and legitimacy of practical rationality, and a concern with the cultivation of personal responsibility” (1999, p.111). While his list is nowhere near exhaustive, it can be used to demonstrate how core democratic values inform the more specific values that are significant for democratic citizens. I discuss these core values in more detail.

Virtue is “a trait of character that is to be admired: one rendering its possessor better, either morally, or intellectually, or in the conduct of specific affairs” (Blackburn, 1996, p. 394). Civic virtue is therefore an admirable trait of character found in democratic citizens. Revolving specifically around personal involvement in processes of social betterment, it is often associated with the duties of democratic citizens. Correspondingly, civic virtue should be defined not only as an admirable trait found in citizens but also as something that is required of them.

Richard Dagger discusses civic virtue in *Civic Virtues: Rights, Citizenship and Republican Liberalism*. He suggests that civic virtuousness is synonymous with the duties of a democratic citizen. Dagger notes,

Unlike personal autonomy, which related to the abstract notion of the self, civic virtue refers to a particular role that a person may occupy—the role of citizen.

Someone exhibits civic virtue when he or she does what a citizen is supposed to do. (1997, p.13)

In other words, civic virtue may be regarded as the “disposition to further public over private good in action and deliberation” (Burt, 1990, p. 24). It forms the composites of what is typically considered “the good citizen”.

Civic virtue is a core value of democratic citizens promoting social cohesion in communities and providing a certain sense of freedom. The second core value – liberty – is often defined in terms of the personal autonomy of citizens and the notion of a free state. Alan Patten discusses this sense of freedom. He notes, “A free state, like a free individual, is one which is not subject to constraints, but which is able to act according to its own will, that is, according to the general will of all members of the community” (Patten, 1996, p. 28). While personal autonomy and freedom of state are not to be confused with “liberty qua liberty,” they certainly represent a sense of freedom for democratic citizens.

Third, equality as a core democratic value is frequently discussed and typically found problematic by scholars. Lucy Taylor notes that all citizens are not equal and claims that the notion of equality remains a problem when attempting to implement ideological political models into common practice. Consequently, she suggests that it is futile to discuss citizenship without first examining its given context (Taylor, 1998). She argues specifically:

Citizenship tends to equate equality with sameness, leading to a homogenizing tendency which at best ignores the very differences which lead to inequality in the first place and which more commonly imposes a blanket norm modeled on those who conform to the traditional identity of the citizen (white, male, property owning), forcing non-conformists either to adapt to the model or accept marginalization. (Taylor, 1998, p. 28)

Her claim may be used to explain why issues relating to difference amongst individuals often surface in debates about citizenship and equality. However, it is important to understand that democratic citizens value a certain sense of equality. Dagger explains:

...the indisputable fact that some people are superior to others in some way, or even a number of ways, cannot count against the claim that all human beings are entitled by virtue of their equal worth to be treated as equals. By conflating merit and worth, those who argue from unequal merit to unequal right simply miss the point (1997, p. 28).

While conscious attempts to treat individual citizens as equals usually fail, modern democracies continue to value the equal status of citizens in terms of their broader socio-political merit. Democratic governments and their citizens are, therefore, engaged in a constant struggle to resolve social inequalities by negotiating legal rights accordingly. As a result, certain governments attempt to award marginalized people certain rights and privileges to promote equal status in society.⁸

These core democratic values are important to an analysis of civic networking in three ways. First, it can be seen how these values are manifested in the more specific values considered significant to democratic citizens. Specific values including that of being pro social, progressive and equality driven, prompt the practice of civic networking. Second, defining these values proves useful for gaining a greater

⁸ One example of such an attempt includes the manner in which the Canadian Government has developed an 'equal opportunities program' for hiring employees. The program ensures that employers affiliated with the public sector hire adequate candidates from marginalized groups in relation to race, sex and disabilities. Thus far, the program has spawned unintended consequences including tokenism and lack of stated competencies, and resentment towards marginalized people from certain groups.

appreciation of why they are considered to hold such importance to citizens. Third, a rigorous examination of core values is relevant in order to comprehend how they intermingle with social facts and lead to the development of norms.

Social facts form the perceived environment of democratic citizens who engage in civic networking. They characterize the socio-political climate and, the physical and social environments of a given politically organized collectivity (Mulligan and Lederman, 1977). Combined with the core democratic values of citizens they contribute to the development of social norms.

Norms are the means through which democratic societies resolve tensions between their shared values and perceived environments. They are attempts to achieve significant democratic values within a given context. I base this on the idea that norms may be conceived as stabilizing socio-political forces that describe conforming behaviors (Savigny, 1991). They relate specifically to democratic practices, such as civic networking, in the sense that they emerge as a set of rules that come to be embodied in practice.

The active participation of democratic citizens is a norm that emerges from the core democratic values detailed above. It consists of the voluntary will of individuals to get actively involved in the politics of their community, nation state, or home territory. In this capacity, active participation may be considered chiefly motivated by a commitment to the common good, as opposed to self-interest. This norm is necessary for democratic government because, much as it may sometimes be perceived as a nuisance to professional politicians, it is “the stuff” of democracy. Pippa Norris remarks that active participation is considered “essential to the lifeblood of democratic societies” (2002, p.

215). Moreover, the norm is considered “good in itself, because it contributes to the maintenance of a free society” (Patten, 1996, p. 26). Active civic engagement manifests itself in several central democratic practices, including civic networking.

The core values, social facts and norms discussed above hold a great deal of importance for democratic citizens. When these foundations are combined, they result typically in the active participation of citizens in political affairs. It is in this manner that democratic citizenship and civic networking are linked. While the practice appears understudied in political theoretical literature, civic networking may be said to constitute the breadth of civic engagement; that is, the degree to which citizens involve themselves in the political activities of their communities and nations states. As a result, it could be argued that the practice fuels democratic societies.

The Relevance of Civic Networking in Democratic Societies

Civic networking is a central democratic practice. It energizes the collective political organization of democratic citizens. Rallies, lobbies, demonstrations, and protests could not materialize in its absence. Consequently, the practice may be considered a necessary ingredient for any socio-political association in a democratic society, regardless of scale. The success of any participatory democracy depends on its “relational bases” (Polletta, 2002, p.15); that is, the ability of citizens to develop civic friendships and networks in order to achieve collective political objectives. Civic networking is the means through which “ordinary citizens join forces in contentious confrontations with elites, authorities and opponents” (Tarrow, 1994, p. 4). It is a means of turning “the public’s changing values and issue interests into a possible political force”

(Dalton and Kuechler, 1990, p. 3). It is in this sense that it contributes to the active participation of democratic citizens in civil society.

Civic networking is a significant democratic practice that effects collective political organization in relation to agency, organizational repertoires and the targets of collective action (Norris, 2002). If agency may be considered “the organizational structures through which citizens mobilize for political expression” (Norris, 2002, p.189), civic networking may be considered its lifeblood. The practice also plays a major role in “the ways in which people choose to express themselves politically” (Norris, 2002, p. 190). Civic networking establishes not only the ties that bind democratic citizens in political collectivities but also the strategies and tactics that result in different forms of political expression. In this capacity, the practice affects the targets of political participation, regardless of whether they are local or global.

Collective politically organized citizens possess the power to alter the political landscape of democratic societies. Civic networking is particularly noteworthy because it has the ability to prompt socio-political change by enabling underrepresented groups to seize political opportunities while advocating new social paradigms (McAdam et al., 1996). Therefore, the practice can be considered central to democratic citizens because it allows them to challenge the hegemonic socio-political forces that oppress them; it allows citizens to act as watchdogs for the activities of their governments.

Democratic order may be perceived as being upheld by “the solidarity of citizens, innovation, and development” (Polletta, 2002,p. 2).⁹ While solidarity and innovation

⁹ Solidarity consists of the manner in which deliberation promotes ownership of and commitment to group decisions. It connects citizens and compels them to act.

relate to the manner in which citizens coalesce and react to socio-political issues, development consists of the manner in which democratic governments respond to the concerns of their citizens. It includes making a concerted effort to “open the political process to a more diverse and citizen oriented set of interests” (Dalton and Kuechler, 1990, p. 3). Simply put, development occurs in democratic government when politicians attempt to establish legitimacy, that is, when they are perceived by citizens to make decisions that “consult widely across society rather than benefiting one group or interest over another” (Carroll and Carroll, 1999, p. 2). Civic networking builds legitimacy in government because it enables citizens to express themselves and effect the decisions of politicians by bringing awareness to particular issues. The practice holds significance for politicians because it provides them with feedback regarding their perceived competency. That civic networking is a precursor for the collective organization of citizens, possesses the ability to prompt socio-political change and can be perceived to build legitimacy in democratic government, makes it an important practice to explore.

Civic networking, as a central practice of democratic citizens in civil society, consists of much more than the sum of its numerous identifiable characteristics. I build on its basic elements to illustrate the tremendous width of its parameters. Civic networking is so varied and complex that one has to approach it with a certain amount of specificity. Civic networking is, for instance, simultaneously a producer and a product of civil society. It always involves power struggles between hegemonic and oppressed parties. This practice is multi-dimensional. As the breadth of civic engagement, it fuels democratic societies via citizenship. Now I turn to an examination of what happens when

this cluster of practices takes place in an online environment, mediated by information and communication technologies.

Chapter 2: Civic Networking as an Emergent Practice in Cyberspace

Telecommunications technologies—computers, satellites, interactive television, telephone and radio—are breaking down the age-old barriers of time and distance that originally precluded the nation’s people from voting directly for the laws and policies that govern them. The general belief holds that representative government is the only form of democracy that is feasible in today’s sprawling, heterogeneous nation-states. However, interactive telecommunications now make it possible for tens of millions of widely dispersed citizens to receive the information they need to carry out the business of government themselves, gain admission to the political realm, and retrieve at least some of the power over their own lives and goods that many believe their elected leaders are squandering. The electronic republic, therefore, has already begun to redefine the traditional roles of citizenship and political leadership. (Grossman, 1995, p. 6)

An explosion occurred, around the mid-1990s, in literature concerning the Internet and its socio-political uses. Above is an excerpt from an influential text published during this moment. *The Electronic Republic* (1995) focuses primarily on how interactive telecommunications or new media transform participatory democracy for citizens. I draw attention to it for two reasons. The first is that a great deal of it focuses on the practice of civic networking in cyberspace. The second relates to Grossman’s view of network technologies, as tools that determine desired outcomes for their users. He suggests that new media enrich democratic societies through the empowerment of citizens. This perception of technology is noteworthy because it is emblematic of much of the recent literature concerning civic networking in cyberspace.

Civic networking in cyberspace encompasses the actions of citizens who practice civic networking in a way that is mediated or facilitated by network technologies. While specific instances of this practice are detailed in this chapter, I focus primarily on recent academic research pertaining to it. Most of this research considers how civic networking is practiced in cyberspace and discusses its socio-political implications. Despite efforts to make valid contributions to the broader knowledge base of civic networking in society, the link between the Internet and this democratic practice remains under-theorized in contemporary discourse. I attribute this problem to the fact that most scholarly attempts to analyze civic networking in cyberspace stem from a limited set of assumptions about technology.

Chapter two is divided into three sections. The first is a brief history of civic networking in cyberspace. I briefly discuss major factors contributing to its emergence. The second section addresses recent academic literature on civic networking in cyberspace. I focus on literature that does not take a critical perspective on technology and outline major perspectives that are apparent in this literature, dividing the work of key scholars into specific categories. The third section provides an overview of the shortcomings of the dominant trends in literature on civic networking in cyberspace.

The History of Networking in Cyberspace

Numerous factors have played a role in the emergence of civic networking in cyberspace. The most significant can be associated with considerable innovation in network technology, access by a greater number of citizens to new developments, alternative appropriations of new network technology for political purposes, the

emergence of a popular discourse concerning the democratic capabilities of networking technologies including the Internet, and a rise in their use to facilitate civic engagement. Through an examination of these factors, I provide a brief history of how the practice came to be and discuss some of its parameters.

From the early 1960s to the early 1970s, Paul Baran, Donald Davies, Robert Kahn, J.C.R. Licklider, Robert Taylor, Larry Roberts and Ray Tomlinson, contributed substantially to the advancement of network technology. Their efforts brought the Internet's progenitor into existence, from the discovery of packet-switching, to the design of an electronic scheme to link computers, to the original conception of ARPANET, to email (see Lebow, 1995; Abbate, 1999; Barney, 2000). ARPANET was a giant computer network designed by the Advanced Research Projects Agency to enable employees to communicate among themselves about projects. Specifically, it included a "wide-area computer network [that] laid the foundations of the Internet as we know it today, developing both the technical and the social infrastructure of Internet working" (Dodge and Kitchin, 2001, p.17). While the development of ARPANET and the Internet marked the start of considerable innovation in network technology, other technical creations had an equally important part in creating the technological conditions for civic networking in cyberspace.

In the mid-1970s, the first generation of microcomputers, or personal home computers, were created by Apple, Radio-Shack and Commodore and made available to consumers. Computer hobbyists and scientists were the first to purchase them. Their access to this technology contributed to a spread of computer expertise among the public. The decade witnessed a rise in computer hobbyists and early hacker culture (Levy, 1984).

By the end of the decade, an American mainframe programmer, Ward Christen, developed the very first computerized bulletin board system (CBBS). His software enabled users to “dial into the system over a phone line and perform function including downloading software and data, uploading data, reading news, and exchanging messages with other users” (Wikipedia, 2004). It was released to the public in 1979. CBBS board, or simply bulletin board system (BBS) software, is significant because it formed the first electronic message-posting network and comprised the first civilian attempt to establish communities online. BBSs were typically used as a way for members to meet others with similar interests and engage in discussion on message boards. Since computer hobbyists and scientists represented the earliest users of BBSs, the topics discussed revolved primarily around computers and computer-mediated communication. They eventually broadened in scope as access to BBSs was increased and users came to be more diversified. Not surprisingly, discussions on message boards eventually extended to include the political issues of the day.

Later in the same year that BBS software was made public, the Unix User Network, or Usenet was created. Two graduate students at Duke University in North Carolina, Tom Truscott and Jim Ellis, who attempted to find a way to transport news and views using the Unix-to-Unix Copy Protocol, initiated its development. With assistance from Steve Bellovin and Steve Daniel, two graduate students at the University of North Carolina, Truscott and Ellis created a conferencing system that linked computers. It laid the foundation for the first online newsgroups. University students originally employed the network to share information, news, and to post research findings. As sites on the network slowly expanded, an updated version of Usenet was required (Hauben and

Hauben, 1997). It was released in 1981 by a University of California at Berkeley graduate student, Mark Horton, and neighboring high school student, Matt Glickman (Livingston, 1988). This newer version of Usenet could handle a much higher volume of postings compared to the small number of articles contained in the newsgroups of the original version.

Approximately one year after its release, Usenet expanded significantly (Hauben and Hauben, 1997). Usenet was considered another attempt to build community online:

Early Usenet users had one thing in common – their passion to discuss a broad range of topics and ideas from politics, science and technology to philosophy, science fiction, literature, or music. People would meet in various newsgroups to freely voice their opinions, ask for advice, and interact with other users who share the same interests. (Usenet, 2003)

The same users who subscribed to newsgroups so enthusiastically contributed most of their content in Usenet. They collectively chose which matters to present, discuss and debate. As the popularity of Usenet increased, it was identified as “an electronic town meeting of the world or to a series of electronic soap boxes” (Hauben, 1997, p. 60).

Douglas Kellner and Richard Kahn note, “newsgroups became a rage and an important source of information, debate and file sharing, as people freely formed topical groups on the Internet’s Usenet platform” (Kellner and Kahn, 2003, p. 298). As communities formed in cyberspace and network technology appeared to foster public deliberation over political issues, its functions began being described as “democratic”.

Though innovation in network technology occurred chiefly in North America, important developments were also made in other parts of the world. Roy Trubshaw, a

student at the University of Essex, created a program titled Multi-User Dungeon (MUD) in 1979. Its purpose was to serve as part of a multi-player computer adventure game. While early online gamers used it primarily, it was later used to “explore basic virtual environments and interact with others in real time” (Kellner and Kanh, 2003, p. 299). MUDs and Multi-User Object Oriented systems (MOOs) were deployed for a variety of uses from entertainment to education. They remained fairly simple, from a technological standpoint, allowing those with access to a computer and modem to engage in computer-mediated communication. MUDs continued to be improved after Trubshaw developed the concept. They spread to gaming communities in North America approximately ten years after their initial development.

Although the use of BBSs, Usenet, newsgroups, MUDs and MOOs spread in the late 1970s, it was restricted to a limited number of citizens in few countries.¹⁰ The majority of the world had never touched a personal home computer, let alone considered introducing one into their household. This was subject to change in the early 1980s, when IBM introduced their personal home computer and Microsoft released its DOS operating system. Other personal home computers, including Apple products, became more user-friendly for the public. This prompted a boom in their sales (Warkentin, 2001). It is around this time that new computer users really began to take an active interest in the ongoing developments in network technology. Civilians were granted full access to the Internet at the beginning of the 1980s, but use of this new information technology remained relatively uncommon.

¹⁰ These citizens consisted mostly of scientists, engineers, and computer hobbyists in mostly North America and Europe (Dodge and Kitchin, 2001).

In 1983, Tom Jennings and John Madill developed a communication protocol that enabled microcomputers to exchange files over a phone line. “By the end of the year, Jennings was operating a microcomputer based bulletin board system that was capable of exchanging files with other computers automatically” (Murphy, 2002, p. 33). The network, named FidoNet, was distributed for free on the condition that it was not used for profit. In a very short period of time, its use grew exponentially until FidoNet was recognized to be the largest BBS network developed (Shade, 1994). While Jennings and Madill encouraged colleagues to employ FidoNet throughout the United States, its use spread to other parts of the world (Dodd, 1992). Brian Murphy notes that FidoNet was:

...the first popular citizen-run alternative to public and corporate computer networking. The fact that it was free and had a robust communication software capable of traversing very low grade phone lines anywhere on earth meant it was the network of choice for those who could not afford or did not have access to the public/corporate precursors of the Internet. It would become the platform for communication amongst activists, development workers, and non-governmental organizations in Latin America, Africa, and the former Soviet Union providing a source of institutional support and technological access evolving over 15 years before the explosion of global Internet action supporting the anti globalization struggle. (2002, pp. 34-35)

FidoNet thus supported grassroots activities and contributed to the mobilization of citizen groups across the world. It became a tool for community building and civic networking on and offline.

Another form of networking technology, Free Nets, emerged alongside FidoNet. Free Nets may be described as “free public-access computer systems for the exchange of information between members of local and global communities” (Shade, 1994, p. 5). Developed by Tom Grunder in 1986, the first Free Net served to link distant clinics affiliated with the medical program at Case Western Reserve University in Cleveland, Ohio. It began as a small BBS for medical doctors that came to be “the first self-described community network mirroring a local civil society group on a computer system” (Murphy, 2002, p. 35). Grunder’s network multiplied as public need for its resources expanded. It took little time for Free Nets to spring up in countries outside the United States. An early example of a Canadian FreeNet is the National Capital FreeNet in Ottawa, which was developed in 1992 (see Shade, 1994). Free Nets have an important place in the history of civic networking in cyberspace because their original conception is directly affiliated with civic networks in North America.

From 1987 and onward, significant improvements were made to the aforementioned developments in network technology. As access to personal computers and modems increased in various places around the world, citizens from various nation states employed these technologies more frequently. Diversified access prompted further innovation and alternative uses of the network technology, including for democratic politics.

In 1991, the Internet began to resemble its current form with Tim Berners-Lee’s development of the World Wide Web application. The Web is said to have “completed the Internet’s transformation from a research tool to a popular medium by providing an application attractive enough to draw masses of potential Internet users into active

participation” (Abbate, 1999, p. 217). Web browsers, including Mosaic and Netscape, sprang up alongside the development of the Web. They enabled users, not only to navigate websites with ease, but also to publish information and communicate with other users. The Internet’s popularity grew significantly in the mid-1990s, with the contributions of both the Web and web browsers (Abbate, 1999).

As new network technology was being employed on a global scale, a number of discourses emerged alongside its public use. “The main theme of these lustrous tales from the electronic interior involved immense economic opportunities for corporations and entrepreneurs” (Murphy, 2002, p. 27). Graham Meikle adds, “Corporations ... began to search for ways to make [the Internet] profitable. Yet just as this commercialisation process began, we also began to hear a lot about the potential the medium had for democracy” (Meikle, 2002, p. 1). In conjunction with the early “get rich quick” discourse, emerged an equally popular discourse concerning the democratic capabilities of network technologies for citizens. It took off in academia with Howard Rheingold’s work in *The Virtual Community* (1993). His timely and influential book explores the Internet’s capabilities to better society. Rheingold’s focus revolves around its potential to “revitalize citizen based democracy,” as he describes a world in which “every citizen can broadcast to every other citizen” (1993, p.14). *The Virtual Community* paved the way for similar influential works.

In 1995, several other scholarly works built on Rheingold’s utopian premise. Examples include: Lawrence Grossman’s *Electronic Republic* (1995), Nicholas Negroponte’s *Being Digital* (1995) and Steven Jones’ *Cybersociety: Computer-Mediated Communication and Community* (1995). These publications share one commonality: each

explores the significance of democratic capacities of network technology in some form or another. They are important to my analysis for two reasons. The first is their enthusiastic promotion of democratic uses of network technology, including civic networking in cyberspace. The second is the manner in which they inspired politicians and reporters to contribute to the discourse. Then American Vice President Al Gore made public remarks, for instance, concerning the Internet's capacities to produce a "new Athenian age of democracy." Moreover, an article was published on the front page of the *New York Times*, which read: "Anyone with a modem is a potential global pamphleteer" (Markoff, 1995). Politicians and reporters followed suit from other countries, including in Canada where then Industry Minister John Manley initiated a program for one year to "Connect Canadians". This was the Chrétien Government's attempt, not only to boost the domestic economy, but also to "... build a stronger democracy through direct citizenship participation" (Manley, 1998). The combination of these messages reinforced a mindset that the Internet and other network technologies had the potential to revitalize democratic citizenship in the twenty-first century.

Fascinating examples of how the Internet was actually being used by democratic citizens surfaced alongside the discourse. They ranged from the work of interest groups, to that of new social movements, to that of transnational social movements. Some of the most memorable examples, gaining considerable attention from international media, included those that encompassed resistance to global market liberalism, or neo-liberalism. I identified four such pivotal events in the introduction of this thesis. Notably, these examples have become archetypal in both popular and academic literature. I now turn to the academic literature on civic networking.

Academic Discourses of Online Civic Networking

Scholars began to focus on civic networking in cyberspace amidst the hype around the Internet's capacities to encourage participatory democracy in the mid-1990s. Their analyses typically considered the emergence of the practice in the realm of cyberspace and contemplated how it was socio-politically effective. While research of this nature began to escalate toward the latter part of the decade, it has recently surged. Despite its ability to map the scope and diversity of the practice, this literature unfortunately contributes little to any theorization of it. In this section, I analyze some of the recent academic literature that concerns civic networking in cyberspace and categorize the work of key scholars in relation to their understanding of network technologies. Two major perspectives emerge. They include: a) instrumental perspectives of technology, b) deterministic perspectives of technology. It is important to note that critical perspectives of technology exist in the academic discourse of online civic networking. I examine these perspectives separately in subsequent chapters, however, because they represent such an insignificant amount of the body of literature on civic networking in cyberspace.

Instrumental perspectives of technology.

Instrumental perspectives commonly emerge in literature about specific technological means and their socio-political implications. These perspectives have their basis in instrumental rationality. "If the predetermined strategic objective is 'x', then, instrumental rationality plans the various steps to realize 'x'" (Hyslop-Margison, 2004, p. 139). Instrumentalists consider technology the application of scientific method to social, political, industrial and commercial objectives. In simpler terms, they consider it a tool

that empowers humans by facilitating their tasks and allowing them to become more efficient. Users of technology are encouraged to discover more effective means of using it in order to maximize their levels of productivity.

Jürgen Habermas provides a classic instrumental perspective of technology in some of his earlier work, including *Towards a rational society* (1970). He argues in favour of the socio-political neutrality thesis of technology. That is, “technology is an ahistorical project of the human species, and is unconnected to any particular ideology or epoch such as the Industrial Revolution, or the present so-called Information Age” (Hyslop-Margison, 2004, p.p. 141-142). Although he does not disagree that technologies are designed to achieve specific ends, Habermas suggests that they do not embody the values of their creators. This could be interpreted as meaning that network technologies have little to do with anything other than their physical architecture.

Despite that the Internet was not originally designed for civic networking, it is certainly employed to facilitate this practice. For instrumentalists, however, the success rate of civic networking in cyberspace depends chiefly on Internet users. It is a combination of their commitment to socio-political progress and their abilities to employ network technology effectively, which determines the broader implications of practice. In other words, the greater effect of civic networking on democracy is tied to both the goals of Internet users and their levels of technological expertise.

Although instrumentalists acknowledge the potential of citizens employing network technologies to renew democracy, their reflections on the current situation range from less to more optimistic. I therefore place instrumental perspectives into two subcategories. The first is comprised of scholars who argue that network technologies

have not yet been used to renew contemporary democracy but may eventually contribute to progressive political change. The second instrumental perspective is made up of scholars who consider how network technologies are currently used to revitalize democracy. I expand upon these subcategories below with pertinent examples in recent academic literature on civic networking.

While scholars who maintain instrumental perspectives of the Internet for civic networking are generally optimistic, there are some who emerge in the literature as considerably less so. These scholars challenge assertions that network technologies actually reshape contemporary democracy; instead, they hold the opinion that the technological mediation of democratic practices of citizenship, including civic networking, simply reinforces existing political norms. While the Internet facilitates civic participation for active citizens, it is incapable of changing the will of the apathetic (Diani, 2001).

Micheal Margolis and David Resnick epitomize a less optimistic instrumental perspective of network technology for democratic citizenship in *Politics as Usual: The Cyberspace 'Revolution'* (2000). They discuss how use of the Internet currently contributes to “politics as usual” and has not yet managed to revolutionized the “conduct of politics and civic affairs in the real world” (Margolis and Resnick, 2000, p.vii). For these authors, this network technology neither draws the apathetic into political participation, nor does it dramatically alter how active citizens practice politics. Margolis and Resnick contend, despite the dedication of active citizens to progressive political reform, these users simply “represent a familiar element of democratic pluralism” (2000, p.18). Robert Putnam offers a similar perspective in *Bowling Alone: The Collapse and*

Revival of American Communities (2000). Positioning himself between enthusiast and jeremiads, he is neither convinced that the Internet currently enhances the participation of citizens in civic life, nor that it impedes social connectedness.¹¹

Even though they are not optimistic that network technologies currently progress democracy, scholars placed in this subcategory of instrumentalism do not deny that these technologies are used to the advantage of active citizens. The Internet is recognized to be a useful tool facilitating democratic practices for citizens predisposed to political activity. It is important to note that these scholars do not suggest that democratic uses of network technologies will never be able to alter the current democratic political environment. They argue instead that any major changes must occur in heads of apathetic citizens before network technologies can be employed in any revolutionary manner.

I return to the example of *Politics as Usual* (2000). Notwithstanding that the Internet has not yet brought about a revolution in democratic politics, the authors do not undermine its ability to meet the needs of active citizens. The Internet is considered a significant tool that facilitates access to information, civic networking and active political involvement for those who seek it. Margolis and Resnick remark,

One of the great advantages of the Web for political activists is that it enables them to access up-to-the-minute information on a huge variety of topics that are relevant to developing their own policy positions and political strategies. Policy-relevant research developed by one group and put up on the Web also can be of

¹¹ Putnam perceives the participation of citizens in civic life as substantial activity exceeding the ephemeral mobilization of coalitions that champion specific causes. He considers it instead along the lines of more permanent, structured, formal organization (Putnam, 2000). Examples include the National Association of American Colored People, the Sierra Club and the Lions Club.

great values to other groups that share their general political orientation ... The Internet can be used to build up discussion lists of activists who can develop political strategies and policy positions and to connect with those who, though devoted to different issues and policies, share similar general political orientations. (2000, p. 17)

The Internet is therefore a tool that stands ready to serve its users. Its ability to affect any sort of political change depends entirely on the intents of its users. The ethnographic research of Kevin Hill and John Hughes leads them to make comparable assertions in *Cyberpolitics: Citizen Activism in the Age of the Internet* (1998). Putnam supports these claims by adding,

The most important question is not what the Internet will do to us, but what we will do with it...in short, how can we make the Internet part of the solution? ... For the moment, I conclude that the Internet will not automatically offset the decline in more conventional forms of social capital, but that it has that potential. In fact, it is hard to imagine resolving our contemporary civic dilemmas without CMC. (2000, p.180)

The Internet may therefore eventually contribute to a revival of civic life, but its success depends chiefly on the manner in which citizens come to appropriate it.

Scholars who consider how uses of network technologies currently advance democracy are more common in academic literature. They differ from the previous subcategory of instrumentalism in the sense that these scholars consider democratic citizens well on their way to revitalizing contemporary democracy with such practices as

civic networking in cyberspace. They are quite specific about how democratic citizens progress democracy with the help of network technologies.

Consider, for instance, Kelly O'Neil's "Web Sites of Resistance: Internet Networking and Civil Society" (2002). Her main argument is that the Internet facilitates the involvement of active citizens in civil society by enabling them to ensure that major global issues affect the decisions of political leaders.¹² The focus of her article is how active citizens employ the Internet to facilitate democratic practices and their results. O'Neil explores a number of cases and suggests, "information and communications technologies allow citizens groups to expand their networks by forming strategic alliances that cross national borders with an unprecedented fluidity" (2002, p. 328).

Bruce Bimber adds to O'Neil's list, in *Information and American Democracy: Technology in the Evolution of Political Power* (2003), that network technologies also facilitate the activities of social movements by providing citizens with an abundance of information. According to him, access to this information facilitates the emergence of post bureaucratic politics by empowering social movements with knowledge. Similar perspectives to O'Neil and Bimber's are offered by Sandor Vegh in "Classifying Forms of Online Activism: The Case of Cyberprotests Against the World Bank" (2003) and Graham Meikle in *Future Active: Media Activism and the Internet* (2002).

Another defining characteristic of this particular subcategory of instrumentalism is that scholars seem to have a slightly different understanding of the strengths of network technologies and the weaknesses of their users. These differences emerge in their more

¹² For O'Neil, global issues revolve around the environment and current economic relations.

developed perspectives political collectivities and democratic governance (Agre, 2002; Hoff et al., 2000). A pertinent example emerges in Manuel Castell's *The Internet Galaxy* (2001). He examines how the Internet facilitated the organization of major movements of the 1990s and discusses the implications related to the dynamics of different socio-political contexts of that decade. While he suggests that the Internet is well suited to assist contemporary social movements, his understanding of its significance extends further. Castells remarks,

The Internet is more than just a handy tool used because it is there. It fits with the basic features of the kind of social movements emerging in the Information age. And because these movements found their appropriate medium of organization, they developed and opened new avenues of social change, which, in turn, enhanced the role of the Internet as their privileged medium. (2001, p.139)

The Internet does not simply play an instrumental role in facilitating expressions of social protest and political conflict; it simultaneously affects the actions of citizens. This interrelationship is perceived to offer extraordinary potential for social progress both locally and globally. Others, including Peter Van Aelst and Stefaan Walgrave (2002), build on Castell's notions of contemporary social movements and their uses of network technologies.

Despite the heralded positive results of technologically mediated civic engagement, scholars in this category of instrumentalism recognize some of its disadvantages as a tool and suggest how they can be overcome. Although websites have the potential to bring together a great deal of information, for instance, the quality of that information does not always prove reliable (Bennett, 2003). O'Neil remarks, "it would be

irresponsible to advocate the embrace of information technologies without also acknowledging that the Internet presents its own set of challenges ...” (2002, p. 332). The onus therefore rests on users to learn to employ network technologies as effectively as possible to increase their efficiency. Whereas more pessimistic instrumentalists call for greater commitment to socio-political progress, this subcategory proposes that users become more technologically inclined. It is thought to be important that users become as familiar as possible with network technology in order to improve upon the progress already being made to democracy.

Although I discuss specific characteristics of each subcategory of instrumentalism, I would also like to comment on general characteristics of instrumental perspectives in the literature on civic networking. Scholars consciously avoid siding with either utopian or dystopian views of technology. They take the safer route and, in doing so, attempt to offer a more balanced analyses of network technologies for democratic practices of citizenship. This middle of the road approach has the effect of making their arguments seem reasonable and difficult to challenge. Nevertheless, these scholars have a tendency to oversimplify the role of technology in society and politics. They explain very little about the broader implications of technologically mediated practices of citizenship.

Another characteristic of instrumental perspectives is that they offer superficial examinations of network technologies for such practices as civic networking. They provide very thorough assessments of how network technologies are used by active citizens but tend not to go any further in their work. Their narrow view focuses too much on network technologies as mere instruments that they cannot hope elaborate on the

broader implications of civic networking in cyberspace for democratic politics and society.

Scholars who offer instrumental perspectives of technology in research on civic networking make some interesting claims regarding the potential of human agents for growth and change. Their deliberate references to the power of Internet users stimulate thought concerning their potential to affect not only the social definitions of network technologies but also their general designs. This keeps the theoretical and practical study of civic networking in cyberspace active. As a result, the primary strength of this work relates to its understanding of human agency and how it might be employed in this field of study to comment on the significance of such practices as civic networking in cyberspace.

Deterministic perspectives of technology.

Deterministic accounts of technology emerge in the debate concerning how far technology does or does not condition socio-political change. Although Thorstein Veblen is charged with coining the term “technological determinism” in *The Engineers and the Price System* (Ellul, 1964, xviii), this popular influential view of technology actually originated in the work of Karl Marx (Smith and Marx, 1994). Technological determinism is the idea that technologies are autonomous and invariant elements in society, which mold the recipient social systems to their imperatives as soon as they are introduced (Brey, 1996). In other words, technological determinism is based on an understanding that “characteristics inherent in the form of new technologies govern the direction of their development and set the conditions for social change that ensues” (Barnes, 2000). In its most extreme form, technological determinism is a belief that the whole of society is

determined by technology. Having stated this, it is important to note the existence of moderate positions of determinism that simply view technology as a key element of socio-political change. While certain determinists view technology's effects in a positive light, others deem them more negatively.

Deterministic perspectives of network technology range from soft to hard and from utopian to dystopian in the literature on civic networking in cyberspace. I divide deterministic perspectives found in this literature into three subcategories. The first is hard utopian perspectives; the second is soft utopian perspectives; the third consists of dystopian perspectives. I expand these subcategories further with pertinent examples in recent academic literature on civic networking in cyberspace.

Although hard utopian perspectives of network technologies have passed their prime, they continue to emerge in the academic literature on civic networking. These perspectives are derived from the belief that network technologies are more than merely tools. Network technology contains within it a number of passage ways to an ideal socio-political environment, both locally and globally. Progress is intricately intertwined with scientific rationality. This fosters a liberal faith in scientific method as a cure-all for the ills of modern civilization.

An example of a hard utopian perspective emerges in B. J. Bullert's "Progressive Public Relations, Sweatshops, and the Net" (2000). She suggests that the Internet is an inherently progressive new medium, which prompts the mobilization of active citizens and helps to sustain movements through the capacities of its technical functions. Bullert focuses on use of both List-servs and email for promoting the active involvement of citizens in civil society. She states,

The flow of information is the life-blood of the anti-sweatshop movement. The new communication technologies provide effective means to organize and mobilize supporters with the click of a mouse, circumventing traditional channels of political communication. International List-servs link activists across national boundaries within seconds. (Bullert, 2000, p. 404)

In other words, the Internet is a viable medium for communication that fuels civic engagement in the context of an era largely characterized by globalization. She maintains that civic networking is “fueled by the easy exchange of information through email and the Internet and by coordination across borders through NGOs and computers” (Bullert, 2000, p. 406). The capacities of the Internet’s technical functions are perceived to render it a fully adequate mode of positively affecting society and politics. Functioning almost like “magic,” the Internet is considered progressive, not only for those who employ it to facilitate civic networking initiatives, but also for society at large (Bullert, 2000, p. 403).

Hard utopian deterministic perspectives of technology seem to solidify how network technologies act as an autonomous force in society. In other words, the site of political renewal and social reform is definitely found in the technology itself. Despite the significant amount of confidence placed in scientific expertise, both the designers and users of network technologies are mere extensions of it. Society, politics, institutions and cultures are thought to be modeled according to the functions of network technology. In other words, technological rationality guides the broader elements of social consciousness, including the most logical courses of action for dealing with significant social, political and economic issues of the époque (Berman and Mulligan, 2003).

Another hard utopian perspective of the Internet is found in Steve Davis, Larry Elin, and Grant Reehner's *Click on Democracy: The Internet's Power to Change Political Apathy into Civic Action* (2003). Based on several interviews with American citizens, the authors argue that network technologies enable civic networking with consistent positive results. A young college student named Zeke Spier is used as perfect example of how the network technology furthers the activities of citizens in civil society. The authors relate:

The Internet's information, communication and networking power enabled Spier to discover his passion for social justice and to find the willingness to sacrifice his freedom to express it. Although other media stirred his emotions and informed his ideology, the Internet enabled him to conduct unmediated, two-way, one-to-one, and many-to-many communication with others of like mind. The Internet became for him the link between education and motivation and the catalyst for action.

(Elin, 2003, p. 99)

They go on to suggest, "the Internet can be a dream come true for communities of action" (Davis et al., 2002, p.166). Not only does it have the ability to unite and invigorate "civic dynamos," but also to lead civic networking initiatives from cyberspace to the streets (Elin, 2003). Referring to advocacy groups with whom Spier became personally involved, the authors contend that the Internet is primarily responsible for their success. In their words, "many of the individuals would have taken to the streets regardless but there would have been fewer of them, and they would have possessed a less common understanding of their purpose and their tactics" (Davis et al., 2002, p.166).

The Internet is perceived to have the ability to promote courses of action in its users, which progress society and politics. A key characteristic of hard utopian

perspectives includes that the Internet is always featured as the best solution to the problem. So long as active citizens employ it to facilitate their attempts to change society, they are likely to be successful (Rheingold, 2002). Hard utopian deterministic perspectives of network technologies therefore maintain that network technologies condition socio-political change for the better.

Soft utopian perspectives are the more popular of the two in the literature on civic networking in cyberspace. Although their general view of technology is clearly linked with hard utopian perspectives, they are considerably subtler in their pronunciation of it. Although network technologies are still considered to provide scientific solutions to social, political, and economics problems, the manner in which this is achieved is disguised as being more realistic. Soft utopian perspectives are less focused on the magic and mysticism of network technologies and more on the relationship between scientific expertise and socio-political progress. They do not turn a blind eye to unintended consequences linked with the use of certain network technologies, including the digital divide. Soft utopian determinists simply trust that further advancements in networking will help to solve these problems (Lin and Dutton, 2003).

A number of soft utopian perspectives emerge in Cathy Bryan, Roza Tsagarousianou and Damian Tambini's collection: *Cyberdemocracy: Technology, Cities and Civic Networks* (1998). These examine the abilities of network technologies to transform democracy. The contributors detail a number of solutions offered by network technologies to political apathy. They highlight its abilities to facilitate communication between citizens, revolutionize access to information and encourage participation in national and international political affairs. Bryan, Tsagarousianou and Tambini remark,

New media, and particularly CMC, it is hoped, will undo the damage done to politics by the old media. Far from the telescreen dystopias, new media technology hails a rebirth of democratic life. It is envisaged that new public spheres will open up and that technologies will permit social actors to find or forge common political interests. People will actively access information from an infinite, free virtual library rather than receiving half-digested 'programming', and interactive media will institutionalize a right to reply. (Bryan, Tsagarousianou and Tambini, 1998, p. 5)

For these scholars, new media appear to wield the power to revitalize the existing social infrastructure that promotes and sustains public debate and political action (Bryan, Tsagarousianou and Tambini, 1998). The studies presented in *Cyberdemocracy* tend not to glorify the use of the Internet in and of itself; they instead idealize what it seems to offer democratic citizens in cyberspace. While contributors to this book are carefully encouraging those involved in civic networking initiatives to take advantage of a perceived "moment of historical opportunity" (Bryan, Tsagarousianou and Tambini, 1998, 16). *Cyberdemocracy* focuses on positive outcomes of civic networking initiatives in cyberspace.

Hard and soft utopian perspectives of network technologies are challenged for many reasons. The scholars who offer these perspectives tend to over romanticize the Internet and other network technologies. This is evident in the language used to describe it. Network technologies are constantly portrayed as a catalyst for active citizenship, a dream, or something that will magically revitalize democracy. This sort of language is distracting, placing too much emphasis on the technology and not enough on its users.

Another reason for which utopian deterministic perspectives are often challenged is their oversimplification of the use of network technologies for civic networking. Citizens form a complex relationship with technology when they practice civic networking in cyberspace. Utopian deterministic perspectives tend to ignore this and contribute very little about the practice. An additional reason these perspectives are heavily criticized is because of their inability to discuss the broader meaning of the online civic networking. This is directly related to their failure to recognize how active citizens impact network technologies when they appropriate them for their purposes. In the grander scheme, these deterministic perspectives contribute very little to a broader understanding of mediated practices of participatory citizenship.

Dystopian perspectives of network technologies for civic networking are interesting to contrast with the previous literature. Whereas the former perspectives are cheerful doctrines of progress, these perspectives consider technology more cynically. The positive contributions made by network technologies to society, politics and economics are matched with an equal or greater number of deleterious consequences.

Network technologies are considered to be value laden in the sense that they influence the practices they facilitate (Whillock, 2000; Wilhelm, 2000). Simply put, they carry ideology with them. Dystopian perspectives hold increased dependence on network technologies accountable for their abilities to dominate and control society. These technologies are perceived to rule society through the politics associated with their very use.

Rita Whillock offers an example of this perspective in “Age of Reason: The Electronic Frontier Confronts the Aims of Political Persuasion” (2000). The purpose of

the article is to draw attention to the negative effects of the Internet on the lives of its users, especially on those attempting to employ it to facilitate political practices. Whillock forwards the argument that, “the greatest negative impact is on the individual” (2000, 166). She argues that the Internet actually undermines the attempts of individual citizens to take active role in civil society by “devaluing” them (Whillock, 2000, 166). According to Whillock the Internet effectively silences individual points of view and promotes a majority perspective. This is said to occur through the manner in which it links active citizens. The nature of information in cyberspace typically causes active citizens to associate with members of preexisting civic organizations, as a way of getting involved, instead of encouraging them to discover the appropriate means of making their message heard. For Whillock, the Internet encourages like-mindedness in a way that is not conducive to democracy.

Cass Sunstein forwards a similar dystopian perspective of the Internet in *Republic.com* (2001). Not only does he examine the negative impact of the Internet on socio-political relations, but also discusses how it controls those who use it to mediate their active involvement in civil society. Sunstein asserts, “it is much too simple to say that any system of communications is desirable if and because it allows individuals to see and hear what they choose” (Sunstein, 2001, 10). For this author, Internet use causes individuals not only to become secluded, but it also discourages them from forging a wide range of common experiences. He remarks, “for countless people, the Internet is producing a substantial decrease in unanticipated, unchosen interactions with others” (Sunstein, 2001, 23). Society’s growing dependence on the Internet has enabled this network technology to dominate physical public space, where citizens were previously

exposed to various points of view, and substitute it with a more private space where they can withdraw into themselves and bolster their narrow-mindedness (Elin, 2003). In this respect, Sunstein suggests that the Internet inhibits the active involvement of democratic citizens in civil society.

Pippa Norris echoes Sunstein's concerns in "Revolution, What Revolution?" (2002b). She considers the Internet to have a negative impact on the desires of citizens to engage in such practices as civic networking. Norris explains,

Given the fragmentation and choice of messages and activities available on the Internet, users may never encounter politics in their web bookmarks of choice. In this sense, although evolving into a mass media in terms of numbers, the net may never be a mass media in terms of a shared political experience. My Internet—where I go, what I read, what I do---is not your Internet. (2002b, p. 77)

Consequently, functions including web bookmarks control how users access information online. Norris acknowledges that the designs of such functions are not neutral and dominate society by encouraging individualism.

Dystopian deterministic perspectives of network technologies have various characteristics. These scholars are not only cynical about attempts made by active citizens to harness the Internet for their purposes, but also pessimistic about the impact of general uses of the medium on democracy. The values embedded in the Internet's functions are considered the site of the problem. There seems to be no escape from this.

Another characteristic of these perspectives, therefore, includes that they offer a gloomy prognosis of Internet use, which, in the end, will not provide any sort of positive democratic action. Access to information online prompts individualism, which is deemed

to dominate culture. An additional characteristic of dystopian deterministic perspectives is their belief that network technology controls society by causing individual users, or in other cases specific online communities, to become sheltered. This is particularly problematic because it does not account for those who successfully use the Internet to interact with others. Consequently, this type of thought may be said to misunderstand the role of the individual active citizen in civic networking initiatives.

A major characteristic of determinist perspectives of network technologies is that they seem to understand technologies as being irreparably and enormously value laden. This draws attention to a number of relevant questions that pertain to the original purpose for a technological design, the manner in which a technology is supposed to be used, and the meaning attributed to it by its users. An adequate understanding of the latter elements proves useful for studies concerning socio-political practices involving the Internet. This is an important characteristic that can be used to benefit a broader understanding of technology in the literature on civic networking.

What is the Problem?

I wish to...persuade those who are concerned with maintaining democratic institutions to see that their constructive efforts must include technology itself.
(Mumford, 1964, p.1)

There is no need to persuade scholars today that technology plays a significant role in democratic societies. The majority of scholars are already aware of the fact. This is especially true of those who examine such practices as civic networking in cyberspace. The main problem with most of the research to date is not that technology is unaccounted

for, but instead that some of its central elements are misrepresented as a result of the limited assumptions surrounding it. The consequence for the majority of recent work on civic networking is that the practice remains under-theorized in contemporary academic discourse.

The strength of instrumental perspectives is that they consider power to exist in the hands of technological users. Although it is important to have a more realistic understanding of this power, the users of network technologies do play a crucial role in developing the meaning that it is attributed by society. If instrumental perspectives focused more on the implications of users as agents, they could potentially impart a profound understanding of a significant element of civic networking in cyberspace.

The strength of deterministic perspectives revolves around the idea that technology forwards ideology and that it is laden with values. Although this ideology is neither predetermined, nor homogenous, deterministic perspectives can be used to consider that a certain amount of non-human agency must be factored into general perspectives of technology. Notwithstanding the particularly skewed view of technological determinists, their perspectives may be used to contribute to an understanding that network technologies are simultaneously affected by values of their designers and by the values of their users. The implications for technology include that the matter of agency is negotiable. The users can attempt to reshape the original parameters of technology design and affect how it comes to be interpreted by society. If deterministic perspectives focused more on the meaning of the values incorporated in technology and their implications, they could also potentially impart a profound understanding of a significant element of civic networking in cyberspace.

It is striking that an approach to civic networking in cyberspace combining the strengths of instrumental and deterministic perspectives could foster a broader understanding of both this practice and democratic citizenship in the 21st century. Critical theoretical perspectives succeed in doing this. I examine these more closely in the following chapter.

Chapter 3: Critical Frameworks for Technology: The Work of Andrew Feenberg

Critical perspectives of technology can offer more profound insight into the practice of civic networking in cyberspace than the dominant perspectives found in the literature. By establishing that both the designs and social uses of network technologies are fluid and open, critical perspectives allow room for outcomes other than those anticipated by either instrumental and deterministic perspectives. With these in mind, those who forward critical perspectives can consider how alternative uses of technological objects constitute a complicated matter with significant socio-political implications for contemporary democratic citizenship.

Critical theoretical frameworks for technology can therefore serve to guide critical perspectives of network technologies in the literature on civic networking. Although they remain in the background of work related to network technologies, these frameworks could direct scholarly effort in a way that would benefit contemporary research on the technologically mediated practices of democratic citizens. In recent years, Andrew Feenberg has developed a strong critical framework for technology. I explore it in some detail, identifying the elements that render it so compelling and demonstrating how this framework might be employed to broaden discussions of online civic networking.

In the first section of the chapter, I briefly examine Feenberg's understanding of critical theoretical frameworks for technology. The second section of the chapter details his specific critical theory of technology. I explore it through an examination of two of his major works: *The Critical Theory of Technology* (1991) and *Alternative Modernity: The Technical Turn in Philosophy and Social Theory* (1995).

Critical Theoretical Frameworks for Technology

Critical theoretical frameworks for understanding technology direct critical perspectives of network technologies in the research on civic networking in cyberspace. I attempt to comprehend these perspectives through Feenberg's eyes before moving on to his critical theory of technology. I briefly examine their early beginnings, list some of their central assumptions and discuss their general relevance to the literature on civic networking in cyberspace.

Critical thought concerning technology in modern industrial civilization has its roots in the combined works of Karl Marx and Max Weber (Giddens, 1973). Marx chiefly attributed the development of capitalist societies to significant increases in capacities to produce goods. Feudal societies became capitalist societies, in the late nineteenth century, when increases to the regular means of production dramatically altered their economic structures. Marx "envisioned a transition to a post-class socialist society ... when further increases in production power made a socialist state possible" (Brey, 2003, p. 40). He therefore understood material conditions and economic forces to direct social change.

Weber disagreed with Marx. He considered the Protestant work ethic instead to drive the conditions for developing a capitalist economic system (see Himanen, 2001).

Phillip Brey explains,

Because capitalism is profit based, it demanded *rationalization* so that result could be calculated and so efficiency and effectiveness could be increased. In this way, rationalization became the distinguishing characteristic of modern societies.

The rationalization of society is the widespread acceptance of rules, efficiency,

and practical results as the right way to approach human affairs and the construction of organization around this notion. (2003, p. 40)

Weber's critique of Marx evolves into a critique of rationalization, which he coins the "iron cage" of bureaucracy. This latter critique manifested into a powerful critique of modern technological society, which has been subsequently taken up by seminal thinkers.¹³ Critical theoretical frameworks emerge from Weber's critique of rationalization.

Andrew Feenberg considers a defining moment of critical theoretical thought on technology to rise out of late 1960s to mid 1970s.¹⁴ During this time, many of those inhabiting Western democratic societies became increasingly hostile toward the general concept of technology. Resentment grew, not necessarily as the result of specific technological innovation *per se*, but mostly as a consequence to widespread acceptance of technocracy by the public and private sectors (Feenberg, 1999).¹⁵ For these citizens, technology in the capacity of technocracy undermined democracy by placing more importance on scientific rationality than on the roles of individual citizens in the broader system of governance. A higher value was attributed to scientific expertise, technological ingenuity and its socio-political contributions than to the active involvement of citizens in

¹³ See Lewis Mumford's *Technics and Civilization* (1934) for an earlier example.

¹⁴ Although Feenberg may have a tendency to over romanticize this era because he experienced it first hand as a student, his views concerning public attitudes towards technology are of interest.

¹⁵ Neil Postman defines technocracy simply as "...a society only loosely controlled by social custom and religious tradition and driven by the impulse to invent" (Postman, 1993, p.14). Feenberg adds that it is "a wide-ranging administrative system that is legitimated by reference to scientific expertise rather than tradition, law or will of the people" (Feenberg, 1999, p. 4). Technocracy, in both senses, can be considered a dominating force perpetuated by a skewed idealization of progress.

civil society. Opposition to technocracy escalated into a counter-cultural critique of technology termed “left dystopianism” (Feenberg, 1999, p. 4). This critique drew many parallels with the emerging mentality of the New Left. Not only did it denounce notions of scientific rationality, but also notions of progress linked with modern thought.

In North America, left dystopianism soared with protests against the participation of American troops in the Vietnam War.

The Vietnam War was conceived by the US government and sold to the public as a technical problem American ingenuity could quickly solve. Today one is astonished to read behaviorist discussions of strategy from the 1960s: villages were bombed to ‘condition’ their inhabitants to reject the communists...(Feenberg, 1999, p. 4)

Social movements opposing the War were intimately associated with left dystopianism. These movements began to surface when young American citizens grew leery of their value to government officials in comparison with that of technological means. It is little wonder that this counter-cultural critique of technology grew eventually to include a critique of the liberal agenda of the time (Feenberg, 1999, p. 4).

In Europe, left dystopianism exploded with the national student protests in France. In May of 1968, students across the country revolted against universities. Discontent with post secondary academic institutions was linked to the way in which they legitimized a system of domination by reinforcing social hierarchies. University administrations were and still remain undeniably hierarchal. At that point, students considered them to be a microcosm of society. They simultaneously rejected the roles they were being made to play and fervently championed causes of the oppressed masses,

with which they considered themselves intimately connected. The student movement encapsulated the shift from traditional leftism to New Leftist ideology; that is, from classical Marxism toward countercultural values. Left dystopianism emerged with resistance to rule by “‘scientific laws’, by the laws of the economy or by technical ‘imperatives’” (Feenberg, 1999, p. 26). French labour unions were inspired both by student demands for reform and their tactics for action. In the same month that the student movement was initiated, millions of workers participated in a general strike affecting the country’s political and economic systems (Feenberg, 1999). Anti-technocracy perpetuated the “May Events”.

Despite its working-class ideology, the May Events articulated its demands in a distinctively anti-technocratic language. Soviet-style socialism was denounced in the same breadth as advanced capitalism: two peas in the technocratic pod. The students and their working-class allies demanded self-management as an alternative. (Feenberg, 1999, p. 5)

In simpler terms, students and workers resisted a system dictated by a specific notion of rationality and progress. Instead of being controlled, they sought to impact their respective situations, bringing forth such concepts in action as “workers control”. While the May Events represented a specific reaction to the technocratic state under then President Charles de Gaulle, dissenting systems of social and political domination spread across the Western world. “The May Events are among the many movements and debates that politicized the question of technology in the late 1960s and early 1970s, to which we owe our current critical consciousness of technology” (Feenberg, 2000, p. 238). The

political climate of Western democratic societies underwent significant changes as a result of this newfound awareness.

Movements and debates associated with this époque contributed to the formation of new schools of thought and, in turn, the advancement of new theoretical frameworks for understanding technology in society. Many of these frameworks drew from the ideology of the New Left; that is, a revitalized form of Marxism. It was attractive to scholars because it promoted New Leftist approaches for identifying and challenging contemporary social ills. In comparison to traditional leftism, these new approaches provided greater room for agency. Technocracy emerged around this time as a social ill to be reckoned with. Social theories, or critical theories, were intertwined with democratic political theories and the philosophy of technology to contain it. If this moment in time can be considered post-modern by the standards of David Lyon (1999), critical theoretical frameworks for technology emerged as a specific response to such a climate.

Major philosophers associated with this tradition include: Jacques Ellul, the Frankfurt School thinkers and Michael Foucault. What seems to stand out in their work is a critique of technological rationality.¹⁶ These thinkers suggest that technological rationality is responsible for various forms of domination in society. Technological rationality promotes conformity, reduces individuality and enables the elite to control society. Critical philosophers of technology "...rejected the idea that there is a single path of progress based on technological rationality, and opened a space for philosophical

¹⁶ Scientific rationality includes, "the apparent rationality of a world shaped by technology and science" (Mattleart and Mattleart, 1998, p. 63).

reflection on social control of technological development” (Feenberg, 1999, p. 6). While they perceived modern forms of domination to be technologically motivated, they allotted room for “a radical reconstruction of the technological base of modern societies” (Feenberg, 1991, p.14). These scholars therefore rejected the determinism of technological resignation. This is noteworthy because it stimulates thought revolving around technology, hegemony and the potential of civil society to subvert it.

A number of significant assumptions form the basis of critical theoretical frameworks for technology. They revolve specifically around technology, society and politics. The first suggests that technology and society are intimately interrelated. “Since technology is society, society cannot be understood or represented without its technological tools” (Castells, 1996, p. 5). A second assumption states that technology comprises a fluid and malleable social entity that is subject to change. The latter is derived from the social constructivist views that “technology is [perceived to be] social in much the same way as [are] institutions. It is neither neutral nor autonomous as many technologists and humanist critics of technology maintain” (Feenberg, 1999, p. 11). Technology is “ambivalent” because it is socially defined (Feenberg, 1991; 1995; 1999). It has the potential to reform societies or hinder their development, depending on the discourse surrounding it and the manner in which users employ it.

Third, since technology is woven into every facet of society, it is assumed to have significant political implications. If technology can be socially defined, it may be used to perpetuate systems of socio-political domination. Critical scholars consider technology as it manifests in technocracy to be one of the social ills of modern societies. Critical theoretical frameworks therefore attempt to redefine the question of technology as

political and demonstrate how it may be addressed from the left (Feenberg, 1991). Those working within this tradition “call for democratic control over the direction and definition of progress, and reformulate leftist ideology in these terms” (Feenberg, 1999, p. 15). It is assumed that technological users have a responsibility to act as watchdogs for society with respect to technological affairs. This constitutes an aspect of the active role of democratic citizens in civil society; they have a duty to resist domination perpetuated by technology and work toward a broader definition of it on their own terms.

Fourth, critical theoretical frameworks seek to overcome technological systems of oppression by “inventing a new politics of technological transformation” (Feenberg, 1991, p.13). Their central goals involve the exposure of new forms of oppression that are associated with modern industrialism. Furthermore, these frameworks attempt to suggest how such forms of oppression might be subjected to resistance by oppressed masses. They ultimately “fuse theory and action” (Littlejohn, 2002, p. 207). Modernity is considered an unfinished process that leaves a great deal of room for the emancipatory reform of society. Therefore, scholars offering critical theoretical frameworks for technology believe they have a responsibility to work towards bringing this potential into existence.

Critical theoretical frameworks for technology generally inform critical perspectives of network technologies in the literature on civic networking. They encourage, for instance, a specific understanding of the role of technology in society. Moreover, they constitute “an alternative approach [which] emphasizes contextual aspects of technology ignored by the [instrumental and deterministic views]” (Feenberg, 1992, p. 3). Consider the manner in which the perspectives of critical theorists of

technology are dramatically different than those of instrumentalist and determinists. Critical theorists of technology view the Internet and other network technologies as having prospective means to effect social change; that is, so long as users are able to overcome the technical codes regulating the use of a given technological object. Their perspective of the Internet assumes that emancipatory reform is possible once oppressive forces have been identified and overcome by users. Users are, therefore, encouraged to overcome technological domination by “inventing a new politics of technological transformation” (Feenberg, 1991, p.13). Civic networking in cyberspace is a case in point, I suggest, as it involves a reconstitution of technical codes in a direct attempt to subvert oppressive socio-political systems.

Critical frameworks also provide scholars with concepts that can be used to interpret civic networking on different levels. Examples include technological rationality and technological domination. The former consists of a widespread acceptance of the normalized uses of given technological objects. Technological domination is a direct result of technological rationality. It emerges in the variety of ways that technology is attributed meaning by members of the social elite (Noble, 1977; Misa, 1988). When applied to the uses of network technologies, these concepts allow a more substantiated exploration of civic networking online by allowing scholars to see that technology is not self-generating. Network technologies have a variety of layers, which warrant the attention from those seeking to understand socio-political practices involving them. With respect to civic networking in cyberspace, critical frameworks for technology draw scholars towards the respective social meanings and cultural horizons associated with sociopolitical uses of network technologies.

Critical theoretical frameworks have an additional effect on research concerning civic networking in cyberspace in their ability to inspire scholars. These frameworks prompt not only criticism of current uses of technology in society but also criticism of the manner in which technology is discussed in research. By encouraging scholars to question technology, those working within a critical framework attempt to bring awareness to the role of technology in systems of domination and change the current status politics. These frameworks therefore add significantly to research concerning civic networking in cyberspace. In the following section I use Andrew Feenberg as an example of a critical scholar of technology who can offer us an interesting framework for analyzing civic networking online.

Andrew Feenberg's Critical Theory of Technology

Over the last ten years, Andrew Feenberg has written three major works that “undertake to provide critical theoretical and democratic political perspectives to engage technology in the contemporary era” (Kellner, 2001b, p. 155). They include: *Critical Theory of Technology* (1991), *Alternative Modernity: The Technical Turn in Philosophy and Social Theory* (1995) and *Questioning Technology* (1999). Feenberg attempts to develop a critical theory of technology in these books that fosters a more profound understanding of the implications of technologically mediated practices of democratic citizenship. I focus primarily on the first two works, as in *Questioning Technology* he primarily restates ideas from his previous works and “complete[s] the cycle with an account of the radical political roots of non-essentialism...” (Feenberg, 1999, p. xvi). By

briefly introducing some of his main influences and extracting aspects of his theory from his first two books, I outline Feenberg's critical framework for technology.

While he has a number of diverse intellectual influences, Feenberg's critical theory of technology is primarily shaped by the thoughts of Martin Heidegger and Herbert Marcuse. Marcuse was a student of Heidegger's from the late 1920s to the early 1930s and Feenberg was a student of Marcuse's in the late 1960s. This would seem to account for what has been referred to as the "Heidegger-Marcuse dialectic" in Feenberg's theoretical approach to technology (Thomson, 2000, p. 226). Before delving into his critical theory of technology, I touch on the manner in which this genealogy manifests itself within it.

Heidegger, renowned German philosopher and author of the internationally celebrated *Being and Time* (1927), continues to be an extremely influential figure in the realm of existentialism, deconstruction and social criticism. He studied under Edmund Husserl, the founder of modern phenomenology, at the University of Freiburg, where he was eventually hired as professor and later Rector (Littlejohn, 2002). He began to mentor Marcuse shortly after becoming professor, which was one year after he published *Being and Time*. Simon Blackburn remarks that major themes in this particular work include,

Modern humanity has lost the 'nearness and shelter' of Being; we are no longer at home in the world as primitive man was; truth is no longer revealed; thought is separated from Being and only a favoured few have any hope of recapturing oneness with Being. (Blackburn, 1996, p. 169)

These themes undoubtedly affected Heidegger's early philosophical teachings, proliferating into his perception of technology, while also impacting upon Marcuse's

intellectual development (Wolin, 2001). This development was not, of course, without its political and philosophical tensions. Heidegger's support for Hitler was not well received by Marcuse, whose middle-class Jewish identity finally caused him to flee Germany. Marcuse did not share Heidegger's view of National Socialism. "To Marcuse, Heidegger's strong early support of National Socialism represented a fundamental betrayal of Heidegger's own 'existential' philosophy, and thus an abandonment of the 'the greatest intellectual heritage of German history'" (Thomson, 2000, p. 227). Marcuse openly vocalized his standpoint on the subject, resulting in the acrimonious conclusion of their relationship. The break prompted Marcuse's return to the writings of Hegel and Marx in accordance with his own studies on fascism (Kellner, 1998).

Despite their estrangement, Heidegger had a significant impact upon Marcuse's perceptions of society and technology. Traces of Heideggerian thought are identifiable in his discussion of technology in *One-Dimensional Man* (1964). While Marcuse remained "cognizant of the limitation of Heidegger's approach" (Wolin, 2001, p. 142), he depended on a number of Heidegger's enduring notions concerning "a new disclosure of being through a revolutionary transformation of basic practices" (Feenberg, 1999, p.154). Despite his criticisms of Heidegger's work, Marcuse considered the ontology of nature in similar terms. Heidegger's "continuing influence is due at least in part to his criticism of modernity and democracy, which he associates with a lack of respect for nature independent of the uses to which human beings put it" (Blackburn, 1996, p.170).

Marcuse left Freiberg in 1933 to work for Max Horkheimer, a contemporary of Husserl's at the University of Frankfurt. Horkheimer headed the Institute for Social

Research, which came to be known as the Frankfurt School.¹⁷ As the political climate in Germany grew absolutely intolerable for anyone of Jewish origin, most of the members of the Frankfurt School exiled to Geneva and later to New York (Kellner, 2001). Marcuse was most productive in North America. His influence as a philosopher peaked in the 1960s, with the publication of *One-Dimensional Man* (1964). This work had a significant impact on the ideological struggles of the time, especially in the unfolding of the May Events. “An unyielding critic of bourgeois culture and civilization as well as historic working-class organizations, Marcuse, a professor at Brandeis University and later at the University of California at San Diego, sought to reveal the new forms of political domination” (Mattleart and Mattleart, 1998, p. 63). Feenberg became well acquainted with Marcuse around this time. Marcuse began to supervise Feenberg’s work and help direct his student. They developed a close relationship and Feenberg’s respect for Marcuse grew considerably throughout the years. Interestingly, Feenberg began to develop his own critical theory of technology shortly after the publication of *Marcuse: Critical Theory and the Promise of Utopia* (1987). He published his first major work detailing it in *The Critical Theory of Technology* (1991).

The Critical Theory of Technology.

The future of industrial civilization is often thought to depend on a major question concerning technology; that is, “must human beings submit to the harsh logic of machinery, or can technology be fundamentally redesigned to better serve its creators?” (Feenberg, 1991, p. i). This question is composed of specific albeit contradictory views of

¹⁷ The Frankfurt school was originally comprised of Max Horkheimer, Friedrich Pollock, Theodore Adorno, Walter Benjamin, Leo Lowenthal and Marcuse.

technology. On one hand, technology is attributed autonomous power enabling it to determine specific outcomes for society. On the other, it represents a neutral instrument open to manipulation by human agents. Either way, an argument emerges for or against technology. This conundrum strikes Feenberg as being misdirected.

The central purpose of *The Critical Theory of Technology* is to urge readers to think outside of the box with respect to matters of technology. To put it bluntly, Feenberg challenges them to think differently about technology and move away from the dichotomy of good and bad. He argues, for instance, “that the real issue is not technology or progress per se but the variety of possible technologies and paths of progress among which [humans] must choose” (Feenberg, 1991, p. i). Feenberg advocates a critical perspective of technology with the capacity of fostering profound insight into the realm of modern industrial civilization. This is achieved by rearticulating the points of connection between technology, culture, scientific rationality and politics.

Feenberg begins by identifying major trends in studies of technology. For him, they take the form of instrumental and substantive theories of technology. He explains that instrumental theories are the most common in technological thought. Technology is generally perceived to empower users and progress civilization. He remarks that these theories lament the neutrality of technology and the possibility of human control over it. Technology is considered, not only “...indifferent to the variety of ends it can be employed to achieve”, but also “indifferent with respect to politics, at least in the modern world, and especially to capitalist and socialist societies” (Feenberg, 1991, p. 6). Consider simple household technologies, for instance, and the ways in which individuals will adapt their functions for their specific purposes. Imagine an artist who uses an

inexpensive food processor to blend combination of acrylic paints, or an electrician who wires his toaster to a timer.

Substantive theories are understood to have their basis in philosophical essentialism. These theories purport that the nature of technology is devious or nefarious. Technology is not at all neutral. It rules society in accordance with the normative politics associated with its use. Consequently, technology is characterized as an uncontrollable monstrosity that changes societies inevitably for the worse as users depend on it. Substantive theories of technology attribute “an autonomous cultural force to technology overriding all traditional or competing values” (Feenberg, 1991, p. 5). Its core beliefs are derived from the original thoughts of Heidegger. Feenberg reviews both instrumental and substantive theories in some detail as an introduction to critical theories of technology. In his opinion, the stronger aspects of each are combined in critical theories of technology.

The social elite, composed of high-powered officials, typically initiates technological design. This means that technologies available today represent different degrees of social, political and economic power held by their promoters and their adversaries. The designs of given technologies are therefore understood to sustain the value system of the social elite through the technological functions. Critical theories recognize the potential of human agency to overcome the dominant value systems by using technology to set into place an alternative social situation. They therefore draw attention to the manner in which technological means are used to arrive at different ends. Specifically, they focus on the democratic nature of technological design. Feenberg remarks that critical theories of technology,

... chart a difficult course between resignation and utopia. [They] analyze new forms of oppression associated with modern industrialism, and argue that they are subject to new challenges. But, having renounced the illusion of state-sponsored civilization change, critical theory must cross the enormous cultural barrier that separates the heritage of the radical intelligentsia from the contemporary world of technical expertise. It must explain how modern technology can be redesigned to adapt to the needs of a freer society. (1991, p. 13)

In other words, they seem to fill in the blanks created by instrumental and deterministic theories of technology.

Feenberg is drawn to critical theories of technology because they regard the design of technology as ambivalent. This means that technology is poised between different possible courses of direction. The direction taken by a given technological object depends chiefly on its users. Will a technological object, for instance, be used strictly to perform the task it was originally intended to perform, or will its users appropriate it for some other purpose? The agency rests with its users, but their ability to subvert the dominant technological rationality exists alongside their ability to identify and judge the values system from which a given technological design emerges. Only then can hegemony perpetuated by technology be subverted and contribute to a freer society.

Feenberg develops his critical theory of technology in the three remaining parts of his book. The first part considers the work of Karl Marx, which plays an important role in the development of all critical theories of society. Although Marx's critique of industrialism is thought to be extremely insightful, Feenberg criticizes it for leaving so little room for change in relation to technology. He notes, "the historical experience of

communism shows that our states are not the primary agents of radical technological transformation, as Marx believed” (Feenberg, 1991, p. ii). His critical theory deliberately explains how progress is possible through the radical reconstruction of the technological bases of industrial civilization. By reinterpreting the works of social theorists like Marx, Feenberg’s theory promotes the invention of “a new politics of technological transformation” (Feenberg, 1991, p. 13). It encourages a different understanding of the role of technology in society and politics, by suggesting that it is an avenue for change.

Feenberg discusses the active involvement of citizens by drawing upon certain thinkers associated with the Frankfurt School. Marcuse’s work, in particular, is used to develop Feenberg’s notion of a subversive rationality of technology. This is an entry point for his examination of existing power relations, hegemonies and resistance. Feenberg elaborates on these ideas and argues that it is possible to work towards a new critical perspective of technological objects. Modern hegemonies are considered predominantly structured around technology, which accounts for severe imbalances in political power. Feenberg draws attention to the development of counter hegemonic activity that involves subversive uses of technology. Although he does not provide very many concrete examples, radio jamming comes to mind. With radio jamming, public frequencies are pirated and subverted for the purposes of independent communication.

Feenberg considers culture, in the last part of the book as a means of painting a more accurate picture of modern technology. He suggests that non-critical theories of technology often discount the different cultures surrounding given technological objects. Consequently, they fail to understand the role of technology in forming and sustaining culture. Technological deterministic perspectives emerge as a consequence to this.

Feenberg argues that a more critical approach to technology helps to distinguish between technology, culture and their relationship with each other. With this in mind, it is possible to consider alternatives to the status quo. Consider hacker culture, for example, and the subversive activities that emerge in this culture. Feenberg concludes by developing this perspective further and explaining how critical approaches to technology can be further developed to take into account culture.

Feenberg's first major work is an introduction to his critical theory of technology. He develops it by reinterpreting the works of renowned social theorists and classical theoreticians of technology. The result is a perspective of technology that proposes a reform of contemporary socio-political relations. This first major work establishes three primary points. The first is that technological design is essentially a social construction. That which a technological object becomes is dependent on its users and how they choose to appropriate it. The second point is that elements of social injustice are contained within the uneven distribution of social influence in technological design. In other words, elite control over the design process of technology contributes to an imbalance in socio-political power relations. The third point is that there is room for change in modern industrial civilizations. Public involvement in technological design can affect significant results. It is therefore possible to democratize the process of technological design. Feenberg elaborates further on these points in his second major work.

Alternative Modernity.

In *Alternative Modernity* (1995), Feenberg reviews a great deal of his thinking in *The Critical Theory of Technology*, but with some notable additions. One of these includes his effort to distinguish himself in the emerging contemporary field of

philosophy of technology. The scope of scholarship in this book exceeds that found in his earlier work. In order to situate his critical theory of technology, Feenberg scrutinizes the work of quite a diverse group of thinkers, including: Langdon Winner, Hebert Marcuse, Jürgen Habermas, Jean-François Lyotard, Bruno Latour, Thomas Kuhn and Donna Haraway. For Feenberg, their work may be used to demonstrate two points. First, he sees in their analyses evidence of an understanding of technology beyond the confines of instrumental and substantive theories. He uses their work to highlight the importance of recognizing “modern technology [to be] neither a savior nor an inflexible iron cage ...” (Feenberg, 1995, p. 2) in academic literature. In this sense, they have paved the way for an alternative view of technology in modern and postmodern industrial civilizations. The second point is that the contemporary philosophy of technology does not consider the idea of “technical politics” to the degree that Feenberg’s deems necessary. Despite their efforts, the work of these scholars stops short of explaining the impact of public involvement on the shape of technological change. *Alternative Modernity* seeks to prepare the philosophy of technology to enter an age of technical politics.

This second major work adds to *The Critical Theory of Technology* by introducing pertinent case studies. Two stand out for my purposes: the case of the French Minitel system and the case involving the movement of AIDS patients. The case of the Minitel serves as a model for existing struggles to subvert technical practices, procedures and designs that are set into place to structure the day-to-day lives of citizens. The Minitel system was launched in the early 1980s by the French state as a means of introducing an advanced rational information system to the general public. It consisted of a network, which enabled electronic searches of France Telecom’s database for names,

addresses, and numbers; it also allowed for computer-mediated communication. As its popularity grew with the public, skilled users hacked the network and altered its functions. The result was computer-mediated communication on a much wider scale than this technology had been originally designed to achieve by its architects. The Minitel became a messaging system accessible to the masses. Scientific-technical rationality was thus subverted, as Minitel became a cultural phenomenon that began to reflect the values of the broader population. Feenberg uses the case of the French Minitel system, not only to demonstrate the process of democratic technical change, but also to link technology to culture in the context of the modern and the postmodern industrial civilization.

The case study involving the movement of AIDS patients is pertinent in a similar albeit slightly different fashion. Feenberg explains,

Just as a rationalistic conception of the computer tends to occlude its communicative potentialities, so in medicine, caring functions have become mere side effects of treatment, which is itself understood exclusively in technical terms. Patients become objects of this technique, more or less 'compliant' to management by physicians. (1995, p. 118)

The AIDS crisis in the 1980s highlighted several problems in the practice of modern medicine. The social structure of the medical institution conflicted with the needs of terminally ill patients, for example, and a need grew for reform. "Instead of being treated like mere objects of medicine, awaiting cure, [patients suffering from AIDS demanded that they become] active partners in a larger research enterprise" (Feenberg, 1995.). This movement did not consist of re-appropriating technology per se, but redirecting medical technique by opposing the nature of the process. Patients suffering from AIDS formed a

movement to resist the status quo of the system and succeeded in making significant changes to the institution of medicine. These studies along with others are used in *Alternative Modernity* to ground his critical theory of technology.

While Feenberg reiterates the three primary points made in *The Critical Theory of Technology*, he adds a great deal more substance to them in this second project. In the first he lays the groundwork for his theory, while *Alternative Modernity* seeks to build on this prior work in practice. Feenberg's theme is made more apparent in this book; that is, "...the inextricable intermingling of scientific-technical rationality and culture" (Feenberg, 1995, p. ix). He argues specifically, from the standpoint of social constructivism, that it is possible to reshape the technical world in which humans live (1995). Of particular interest is the way in which Feenberg offers a specific social criticism combining elements of democratic politics, culture, sociology of technology and philosophy.

Alternative Modernity adds further concepts into his critical theoretical framework for technology. They include: hermeneutic dimensions of technology and subversive rationality. Hermeneutic dimensions of a technological object are its social meanings and cultural horizons. A technical object's social meaning includes how it comes to be appropriated in relation to the specific ends it was originally designed to achieve. The idea that there exist different meanings associated with given technologies contributes to the ambivalence of their designs. The cultural horizons of a technical object consist of the context within which it comes to be developed. Consider the steam engine's cultural horizons:

The steam engine, for example, was introduced into a burgeoning capitalist culture marked by class stratification and economic exploitation. Its development and widespread employment precipitated innumerable negative changes for 18th century workers including the demise of the craft guilds, rising unemployment among skilled workers, and the growth of child labour. (Hyslop-Margison, 2004, pp.141-2)

Technical codes, or regimes, promote the cultural horizon of a technical object at the level of design by prescribing its use. The steam engine was originally developed for the transportation of cargo. Technological hegemony is a form of ideological domination that is perpetuated by technological rationality. It surfaces in the different ways that technology comes to be defined by members of the elite culture, reflecting their values and biases. Subversive rationality consists of democratic attempts to restructure the technological bases of industrial civilizations. This particular concept, in relation to the others, is situated at the centre of Feenberg's theory.

Alternative Modernity also attempts to recognize its Western nature. Feenberg notes that while Western rationality and its technological imperatives seem to have achieved universal practicality, this is simply a grand narrative. These elements are no more universal than they are autonomous in nature. To suppose otherwise is to discount the complexity of technology and the ability of users to invent alternative modernities based on different cultural values (Feenberg, 1995, p. 230). In his words, "modernization itself is a contingent combination of technical and cultural dimensions subject to radical variation. Aesthetics, ethics and culture can play a role alongside science and technology in the emergence of alternative modernities" (Feenberg, 1995, p. x).

While *Alternative Modernity* is a more challenging read than *The Critical Theory of Technology*, it provides a more thorough overview of the field of philosophy of technology and a more robust treatment of Feenberg's theory. The combination of both works constitutes an excellent starting point for reconsidering technology, culture, society and politics in the modern and postmodern era. Feenberg's major works can be used to inspire critical analyses of the Internet that benefit the research on civic networking in cyberspace. By encouraging scholars to question technology, his critical theoretical framework, not only attempts to bring awareness to the role of technology in systems of domination, but also to change the status quo.

Chapter 4: Critical Perspectives in Academic Discourse of Online Civic Networking

The practice of civic networking in cyberspace has great potential to reveal significant information about the current state of democratic citizenship. It epitomizes the role of technology in society and politics, the nature of contemporary socio-political power struggles and the seemingly new attempts by democratic political collectivities to effect change. My purpose, therefore, is to encourage insightful and original thought pertaining to this practice. Since critical theoretical frameworks seem to foster this thought, I support the development of more robust critical perspectives of technology pertaining to the academic discourse of online civic networking.

Chapter four is divided into three sections. The first addresses perspectives of network technologies that may be considered to be more critical in the literature on civic networking in cyberspace. I identify the central characteristics of these perspectives in detail. The second section examines the strengths and weaknesses of such in relation to the discussion concerning critical theoretical frameworks from the last chapter. The third section consists of concluding remarks.

As I demonstrated in chapter two, many of those researching civic networking online depend too heavily on the empirical aspects of social research and neglect interpretive methods. Consequences associated with this approach include the production of too many descriptions of information communications technologies and very general references to technologically mediated civic networking, but very little interpretative data concerning the practice. It is striking that Andrew Feenberg's critical theory of technology can be employed to bypass these consequences and others associated with instrumental and deterministic perspectives of technology.

I consider Feenberg's hermeneutic constructivist approach to be well suited for research on civic networking in cyberspace. It urges scholars to consider the various dimensions of the Internet, prompting them to make relevant comments about the social meanings attributed to this network technology and its cultural horizons. Consider, for example, the significance of the civic networking online in relation to the fact that the Internet was initially popularized as a technology offering tremendous economic opportunities for corporations and entrepreneurs. The very notion of "get rich quick" schemes online constituted a major aspect of the normative technological codes guiding the Internet's use. In spite of this, it has become normal for the Internet to be deployed to counter dominant socio-political and economic forces. Up to this historical juncture in the development of the Internet, conflicting worldviews have therefore accounted for alternative practices in cyberspace. Upon further exploring these areas, the openness in the design of the Internet seems more pertinent.

The normative technological codes of the Internet encourage technological hegemony. This prescribes who uses the Internet and for what purposes. On a larger scale, these codes are prompted by technological rationality, which undeniably affects numerous facets of society including political and economic relations. They are reinforced by technocracy, which stands as an oppressive force in modern post-industrial civilizations.

From the point of view of historicism, it becomes evident that the progress of network technology does not consist of a sequence of prescribed developments, but is instead led by several social variables in a number of directions. This thinking leaves considerable room for the alternative uses of network technology, which eventually form

some of the practices of civic networking in cyberspace. Early users of network technologies became involved in an ongoing “protest” over the direction of their development. This protest affected not only the design of Internet applications, including Fidonet, but also influenced alternative uses of its existing technological functions, including the employment of BBSs in attempts to effect socio-political reform. Certain aspects of this protest are overt while others are not. Nevertheless, it involves an attempt by users to democratize modern technology. With this in mind, specific examples of civic networking initiatives in cyberspace are significantly more meaningful.

Civic networking in cyberspace stands as a concrete example of the manner in which technological objects are ambivalent and how users may employ them to mediate political activity. As Feenberg notes,

Networking has given rise to one among many such initiative public reactions to technology. Individuals who are incorporated into new types of technical networks have learned to resist though the net itself in order to influence the powers that control it. (1992, p. 24)

Resisting technological hegemony is therefore an aspect of resisting political hegemony, when network technologies are used to mediate involvement in civil society. The practice itself remains convoluted because it is a form of resistance that may be analyzed on two different levels. The implication of civic networking in cyberspace for citizens revolves around the manner in which citizens gain a specific type of power through their use of technology. The implications of the practice for modern politics remain to be seen.

A number of questions prompted by Feenberg’s critical theory of technology take us into the first section of this chapter. How, for instance, do network technologies bind

users with politics? How do they promote ideology and culture? How do network technologies oppress their users? In terms of the process of design other important questions revolve around how network technologies are open to democratic reconstruction. How can users intervene in the design process? These important questions are taken up by those who offer a more critical perspective of network technology in recent research on civic networking in cyberspace.

Existing Critical Perspectives

As I discuss in second chapter of the thesis, most perspectives of network in the academic discourse of online civic networking technologies may be labeled as either instrumental or deterministic. Nevertheless, some scholars remain cognizant of the limitations of these perspectives of network technologies and attempt to make bolder statements about civic networking in cyberspace that are more indebted to critical theoretical frameworks for technology. I examine this rather limited body of work and characterize the perspectives emerging within it.

Critical perspectives in literature concerning civic networking online acknowledge the capacities of human agents in light of their understanding that network technologies are value laden. Contrary to instrumental and some deterministic perspectives, critical perspectives do not consider technology to be neutral. They interpret socio-political uses of network technologies as contextual and socially constructed. Correspondingly, a major characteristic of these perspectives arises from the way in which scholars acknowledge multi-layers of network technologies and consider their implications.

Brian Loader offers an earlier example of a critical perspective of network technology in *Cyberspace Divide: Equality, Agency and Policy in the Information Society*. Considering how the Internet's technological uses and social meaning are developed, he notes:

Social action and inaction on the part of different groups plays a vital part in the social shaping of technological applications. The existence of the information poor for example may be due to the express desire on the part of some information-advantaged groups to deliberately and systematically exclude them from participation in the wider community. (Loader, 1998, p. 9)

Network technologies are attributed meaning based on their architectural designs and the socially constructed technical codes prescribing their use. Loader considers the latter to be particularly significant in the development of technological oppression. He suggests, however, that the development of different technical codes can alter the dominant social meanings attributed to network technologies. This could potentially result in the inclusion of currently excluded groups from the design process. Loader advocates the involvement of various groups in the negotiation of the Internet's social meaning in order to render the design process more democratic.

Recognizing the significance of the multi-layers of network technologies, those who offer critical perspectives of network technologies discuss the capacities of human agency in more depth than those who offer an instrumental perspective. Critical perspectives of technology emphasize the abilities of users to overcome domination perpetuated by technological rationality through conscious struggle. In other words, they

consider how users resist subjugation by reconstituting network technologies to cater more effectively to socio-political reform.

Despite attempts to exclude certain groups from the process of technological development, Loader describes how some manage to resist this technological hegemony. Certain citizens, for instance, are able to discover ways of employing the Internet to forge positive new identities online. Although resisting subjugation is never an easy process, especially for the economically disadvantaged and marginally situated, Loader considers the struggle worthwhile. He explains,

The development of the information society is not likely to be characterized by a linear technological progression, but rather through the often competing social forces of innovation, competitive advantage, human agency and social resistance. Where the benefits of the information communication technology are unevenly spread and the disadvantages are particularly concentrated in the ‘black holes of human misery’ it does not seem unreasonable to suppose that the cyberspace divide will be a significant feature of political dialogue in the early years of the new millennium. (Loader, 1998, p. 15)

It is therefore feasible, he asserts, to democratize network technologies via civic participation. Civic networking in cyberspace is an active attempt to resist technological hegemony by reconstituting the dominant social meaning attributed to network technologies by socially and economically privileged groups. Mark Brown adds, in “The Civic Shaping of Technology: California’s Electric Vehicle Program” (2001), that the success of these sorts of initiatives are significantly boosted by enlisting the support of sympathetic governments.

Lee Salter contributes a similar perspective in “Democracy, New Social Movements and the Internet: A Habermasian Analysis” (2001). Despite the fact that a large portion of this work critiques how scholars have borrowed Habermas’ theories in their work concerning the Internet as a new public sphere, Salter provide a distinctly critical account of the Internet that relates to the socio-political practices of democratic citizens in cyberspace. Although technical objects are designed with an initial purpose in mind, Salter recognizes that they often come to be appropriated in alternative ways by their users. He acknowledges that technical objects have hermeneutic dimensions, which warrant scholarly attention. In his words:

The society, and groups within it, will interact with the technology both before and after the design process, shaping it and modifying it to suit their own practical prioritized objectives. Indeed, different groups and classes in a single society will have divergent interest requirements of a technology and will struggle to control its implementation in accord with these. (Salter, 2001, p.120)

Of course, Loader does not suggest that technical objects are without their intrinsic qualities. Characteristics that are built into technologies render their capacities to perform certain tasks impossible. A radio, for example, cannot be used to refrigerate food. Salter recognizes that technical objects are impacted upon by the values of engineers, political figures and the social elite. Consequently, he warns, “a cautious balance must be held between the transformative capacities of a technology on the one hand, and the capacity of social agents to use technologies, and shape them in their use, on the other hand” (Salter, 2001, p.121).

Critical perspectives of network technologies for civic networking make interesting assertions concerning contemporary democratic citizenship. Scholars maintain that network technologies facilitate the involvement of active citizens in civil society, only when users deliberately overcome the technological regimes that regulate their use. This means that emancipatory reform is achieved after technological domination is identified and tackled by those using network technologies to facilitate such practices as civic networking in cyberspace. Active citizens employing the Internet to facilitate civic networking initiatives are encouraged, therefore, to reinvent the politics of technological use, while effecting contemporary democratic political relations. These perspectives affirm the manner in which resisting technological hegemony constitutes an aspect of resisting political hegemony, when the Internet is used to mediate involvement in civil society.

Douglas Kellner provides a distinctly critical account of the Internet for civic networking in a number of recent publications including “Globalization, Technopolitics and Revolution” (2003), accompanied by Richard Kahn in “Internet Subcultures and Political Activism”(2003) and “New Media and Internet Activism: From the ‘Battle of Seattle’ to Blogging” (2004). For Kellner, politics in the modern era is increasingly mediated by technologies. Correspondingly, the Internet is considered to play a progressively more important role in the significant political struggles of the day. Kellner recognizes that there are particular values ingrained in the Internet. He remarks, “...the technological revolution perpetuates the interests of the dominant economic and political powers, intensifies divisions between the haves and have nots, and is a defining feature of a new and improved form of global technocapitalism” (Kellner, 2003, p. 2). Although

dominant uses of the Internet benefit hegemonic socio-political forces, it can also be used to counter these forces. Kellner refers to a range of cases where it is redeployed to advance the goals of oppositional political movements, including: the Zapatista movement, the lobby against the MAI, and the demonstration in Seattle against the WTO (Kellner, 2003). Both he and Kahn “examine the ways in which everyday people subvert the intended uses of [the network technology] toward their own needs and uses” (Kellner and Kahn, 2004, p. 5). Not only can citizens reconstitute the Internet’s applications for civic networking initiatives, but also alternative uses of the mainstream medium have a tendency to spawn pertinent innovative design.

Innovative forms of communicative design, such as blogs¹⁸, wikis¹⁹, and social networking portals have emerged as central developments of the Net’s hypertextual architecture, and online phenomena such as hacker culture and Web militancy are no longer the elite and marginal technocultures of a decade ago. (Kellner and Kahn, 2004, p. 5)

Cyberspace is considered a site of struggle for those citizens who engage in oppositional technopolitics. Kellner and Kahn note that the activity online has rendered the Internet “... a contested terrain, used by the left, right and center of both dominant culture and subcultures to promote their own activities and interests” (2003, p. 14). Consequently,

¹⁸ Blogs consist of personal logs published online. They are considered simple enough for users to create and maintain. Kellner and Kahn remark, “Combining the hypertext of webpages, the multi-user discussion of message boards and listservs, and the mass syndication ability of RSS and Atom platforms (as well as e-mail), blogs are popular because they represent the next evolution of web-based experience” (2004, p. 11).

¹⁹ The authors define wikis as, “popular innovative forms of group databases and hypertextual archives that work on principle of open editing, meaning that any online user can not only change the content of the database, but also its organization” (Kellner and Kahn, 2004, p.11).

Kellner suggests that active democratic citizens have a civic duty to engage with network technologies like the Internet and scholars must “critically examine the developments of the cyberculture” (2003, p. 20).

In relation to the characteristics of critical theoretical frameworks for technology, critical perspectives of network technologies in the literature on civic networking possess certain specific characteristics. They have an interesting understanding of why the Internet cannot be considered neutral. Values imbedded in the process of technological development favor techno-capitalists and their uses of the Internet’s applications. Nevertheless, active citizens employing the Internet to facilitate their involvement in civil society can resist these values. Another characteristic of these perspectives, then, includes their acknowledgement of the ambivalence of technological tools. According to those who forward these claims, there are a variety of ways to counter technological domination. Correspondingly, critical perspectives of network technologies for civic networking offer generally positive implications for democratic political activity today.

Strengths and weaknesses.

While critical perspectives of network technologies in the literature on civic networking are considerably more informative and powerful than instrumental and deterministic perspectives, it is necessary to consider their respective strengths and weaknesses. I explore some of these here, using Feenberg’s critical theoretical framework for technology as a guide.

The critical perspectives discussed above possess a number of strengths. When measured against Feenberg’s theoretical framework, a decided strength includes that

these critical perspectives achieve a proper balance between empirical aspects of social research and interpretive methods. In doing so, they move beyond basic descriptions of Internet's functions and general references to civic networking in cyberspace. Unlike instrumental and deterministic perspectives, the focus of critical perspectives of network technologies revolves around the nature of civic networking in cyberspace. Scholars who offer these perspectives make a conscious effort to acknowledge the various layers of the practice.

Also, those who offer critical perspectives of network technologies question technology in a considerably different manner than do instrumentalists or determinists. They completely abandon the dichotomy that technology is either good or bad and contemplate questions comparable to those posed in the introduction of this chapter. These perspectives foster more profound insights into the realm of modern democratic politics by rearticulating the points of connection between technology, culture and scientific rationality. I attribute this to their hermeneutic constructivist approach to network technologies.

It is clear those who offer critical perspectives that technology does not result from one given ideology, or rationality, but from a combination of technical and social factors. In this respect, these perspectives account for the hermeneutic dimensions network technologies. This is important because it allows scholars to account for different social meanings attributed to given network technologies. Once it is understood that social processes determine the definitions and social roles of network technologies, it becomes easier to consider how these processes might be subverted. "Conceiving technology as socially constructed, as dependent on specific social structures and cultural

values, robs it of its independent force and power” (Kellner, 2001b, 157). Critical perspectives of network technologies therefore have a better understanding of the matrix of social interests that enter into the development of these technological objects.

More than simply understanding the effects of stakeholders on processes of technological design, critical perspectives of network technologies contribute significantly to a broader understanding of technological democracy and its ties with democratic citizenship. As Feenberg (1991) suggests, it is rare for technological matters to be recognized as public issues in the usual respect. Interestingly enough, citizens still become involved in protests over technology. Critical perspectives of network technologies articulate how civic networking in cyberspace constitutes such a protest. They have an acute sense of the power struggles occurring in the conscious attempts to radically reconstruct the technological basis of post-industrial civilization. In this respect, their understanding of technological hegemony and subversive rationality is considerably more advanced than dominant perspectives of network technologies.

Quite generally, critical perspectives of network technologies foster a broader understanding of civic networking in cyberspace by detailing more about the practice than instrumental and deterministic perspectives. Despite the variation in their tone, particularly in the manner that some are more articulated than others, scholars who offer critical perspectives of network technologies make more robust attempts to theorize the practice than do their colleagues.

Although critical perspectives in current research on civic networking in cyberspace possess the aforementioned strengths, there are simply not enough of these perspectives in the body of literature concerning civic networking in cyberspace. In order

for the state of academic discourse of online civic networking to improve, critical perspectives of network technology must come to occupy a considerably larger amount of the current body of research.

The limited number critical perspectives of network technologies in the current literature possess weaknesses worth discussing. I question, for instance, the different tones used by those offering these perspectives. Loader's general tone seems considerably more negative than Salter's. While neither of these perspectives can be considered instrumental nor deterministic, very subtle links with both remain obvious. Although the works of these scholars are on a different level than that of their confreres, their critical perspectives of technology ought to walk the fine line between slightly more positive and slightly more negative framings of network technology. Kellner and Kahn, in contrast, seem to do this in their work.

Except for in the case of Kellner and Kahn's critical perspectives of network technologies, the lack of examples offered in the literature also strikes me as a weakness. It strikes me that coupling pertinent cases of civic networking in cyberspace with critical perspectives of network technologies would further strengthen this body of work.

A final weakness in this body of literature has to do with the logical outcomes attained by those who offer critical perspectives of network technologies in relation to civic networking in cyberspace. While they offer tremendous insights into the different dimensions of the practice, they do not necessarily articulate its broader implications for contemporary citizenship to their full capacity. These perspectives could dig deeper to make even more profound observations concerning civic networking in cyberspace. I stated in the introduction of the chapter that this practice constitutes counters hegemonic

activity on two fronts: users resist technological hegemony while they simultaneously resist political hegemony. Although the aforementioned perspectives begin to hint at this in the literature, exploring this avenue more thoroughly could contribute to richer analyses of civic networking in cyberspace.

Concluding remarks

In this final section of the thesis, I would like to reflect on the entire body of research on civic networking in cyberspace and make recommendations for future research on civic networking in cyberspace. Considering the literature on civic networking in cyberspace, three main issues arise. The first includes that the dominant perspectives of technology hinder analyses of civic networking online. The second includes that a more critical perspective of technology is needed. The third issue is that the current critical perspectives offered in this literature could be further refined. I discuss these ideas in more detail.

Instrumental and deterministic perspectives of technology seem only to contribute to the academic discourse of online civic networking when their respective strengths are extracted, modified and condensed into a more critical perspective of technology. Alone, neither one of these perspectives of technology is capable of contributing a complex enough understanding of practice. Each perspective remains blind to the other's respective strength and, consequently, misrepresents the intricate dynamics of civic networking in cyberspace. Dominant perspectives of technology in the academic discourse of online civic networking mislead scholars, politicians and journalists.

If the current state of research is to be altered, the dominant perspectives of technology must be replaced with a more critical perspective in the literature on civic networking in cyberspace. As a review of the literature suggests, critical perspectives are barely visible in the current research on civic networking in cyberspace. Given the flaws of instrumental and deterministic perspectives of technology, I consider this to be hardly acceptable. It is therefore recommended that future researcher consciously employ a strong critical theoretical perspective to direct their efforts.

If critical perspectives are to occupy a dominant role in the literature on civic networking in cyberspace, the limited number of existing perspectives will have to be refined. Instrumental and deterministic perspectives of technology currently dominate the literature on technologically mediated practices of citizenship because they represent common views of technology that have existed in society since the very development of technology. In order for critical perspectives of network technology to become prominent in academic discourse of online civic networking, scholars will have to offer very clear and persuasive articulations of these perspectives. While an exact prescription to achieve this goal exceeds this thesis, a good starting point might be found in strong critical theoretical frameworks such as Andrew Feenberg's.

The watershed moments of civic networking discussed in the introduction of the thesis appear significantly different upon being reexamined with a more critical perspective of technology. Consider the international lobby against the MAI, for example. The role of the Internet and the activities of citizens immediately appear different. Complex interaction with network technology and struggles against hegemony stand out. This prompts more nuanced conclusions about the practice indebted to a more

critical perspective of technology. I look forward to the publication of future works forwarding more insightful and original thought on this event and others.

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Bibliography

- Abbate, J. (1999). *Inventing the Internet*. Cambridge, MA: MIT Press.
- Agre, P. E. (1997). Building community networks. In P. Agre & D. Schuler (Eds.), *Reinventing technology, rediscovering community: Critical explorations of computing as a social practice* (pp. 241-248). Greenwich, CN: Ablex Publishing Corporation.
- Agre, P.E. (2002). Real-time politics: The Internet and the political process. In *The Information Society* 18 (5), 311-331.
- Barney, D. (2000). *Prometheus wired: The hope for democracy in the age of network technology*. Vancouver : UBC Press.
- Bayne, N. (2000). Why did Seattle fail? Globalization and the politics of trade. In *Government and Opposition* 35 (2), 131-151.
- Bennett, W.L. (2003). Communicating global activism: Strengths and vulnerabilities of networked politics. In *Information, Communication and Society* 6 (2), 143-168.
- Berman, J. & Mulligan, D. (2003). Digital grass roots: Issue advocacy in the age of the Internet. In D. Anderson and M. Cornfield (Eds.), *The civic web: Online politics and democratic values*, pp. 77-93. Lanham, MA: Roman & Littlefield Publishers.
- Birch, A. (1993). *The concepts and theories of modern democracy*. London and New York, NY: Routledge.
- Blackburn, S. (1996). *The Oxford dictionary of philosophy*. Oxford; New York, NY: Oxford University Press.
- Bresser-Pereira, L. (2002). Citizenship and res publica: The emergence of republican rights. In *Citizenship Studies*, 6 (2), 145-164.
- Brey, P. (2003). Theorizing modernity and technology. In T. Misa, P. Brey and A. Feenberg (Eds.), *Modernity and technology*, (pp.33-71). Cambridge, MA: MIT press.
- Bryan, C., Tsagarousianou, R. & Tambiani, D. (Eds.). (1998). *Cyberdemocracy: Technology, cities and civic networks*. New York, NY: Routledge.
- Bullert, B. J. (2000). Progressive public relations, sweatshops, and the net. In *Political Communication* 17: 403-407.
- Burt, S. (1990). The good citizen's psyche: On the psychology of civic culture. In *Polity* 23, 23-28.
- Carroll, B.W. & Carroll, T. (1999). Civic networks, legitimacy and the polity process. In *Governance* 12 (1), 1-28.
- Castells, M. (1996). *The rise of the network society*. Cambridge, MA: Blackwell Publishers.
- Castells, M. (2001). *The Internet galaxy: Reflections on the Internet, business and society*. Oxford: Oxford University Press.
- Chatfield, C. (1997). Intergovernmental and nongovernmental associations to 1945. In J. Smith, C. Chatfield & R. Pagnucco (Eds.). *Transnational social movements and global politics: Solidarity beyond the state* (pp. 19-42). Syracuse, NY: Syracuse University Press.
- Clarke, N & Rempel, M. (1997) a. *Citizen politics in post-industrial societies: Interest groups transformed*. Boulder, CO: Westview Press.

- Clarke, Tony & Barlow, M. (1997) b. *MAI : the Multilateral Agreement on Investment and the threat to Canadian sovereignty*. Toronto: Stoddart.
- Cleaver, (1998). The Zapatista effect: The Internet and the rise of an alternative political fabric. In the *Journal of International affairs* 51 (2) 621-640.
- Cohen, J. & Arato, A. (1992). *Civil society and political theory*. Cambridge, MA: MIT Press.
- Dagger, R. (1997). *Civic virtues: Rights, citizenship and republican liberalism*. New York, NY: Oxford University Press.
- Dalton, R. & Kuechler, M. (Eds.). (1990). *Challenging the political order: New social movements in Western democracies*. New York, NY: Oxford University Press.
- Davis, S., Elin, L. & Reeher, G. (2002). Click on democracy: The Internet's power to change political apathy into civic action. Boulder, CO: Westview Press.
- Deibert, R. (2002). Civil society activism on the World Wide Web: The case of the anti-MAI lobby. In D. Cameron and J. Gross Stein (Eds.), *Street protests and fantasy parks: Globalization, culture and the state* (pp. 88-108). Vancouver: UBC.
- DeLuca, K & Peeples, J. (2002). From public sphere to public screen: Democracy, activism and the "violence" of Seattle. In *Critical Studies in Media Communication* 19 (2), 125-151.
- Diani, M. (2001). Social movement networks: virtual and real. In F. Webster (Ed.), *Culture and politics in the information age: A new politics?*
- Dodd, C.A. (1992). What is Fidonet: Discussion of the growth and development of an amateur computer network. *Carleton University working papers in public access networks, #9*. (Anonymous FTP to alfred.carleton.ca/pub/freenet/working.papers.)
- Dodge, M. & Kitchin, R. (2001). *Mapping Cyberspace*. London: Routledge.
- Eagleton-Pierce, M. (2001). The Internet and the Seattle WTO protests. In *Peace Review* 13 (3), 331-337.
- Ehrenberg, J. (1999). *Civil society: The critical history of an idea*. New York, NY: New York University Press.
- Elin, L. (2003). The radicalization of Zeke Spier: How the Internet contributes to civic engagement and new forms of social capital. In M. McCaughey & M. Ayers (Eds.), *Cyberactivism: Online activism in theory and practice*, pp. 97-114. New York, NY: Routledge.
- Feenberg, A. (1999). *Questioning technology*. New York, NY: Routledge.
- Feenberg, A. (1995). *Alternative modernity: The technical turn in philosophy and social theory*. Berkley, CA: University of California Press.
- Feenberg, A. (1994). Subversive rationalization: Technology, power and democracy. In A. Feenberg & A. Hannay (Eds.), *Technology and the politics of knowledge* (pp. 5-25). Bloomington, IN: University of Indiana Press.
- Feenberg, A. (1991). *Critical theory of technology*. New York, NY: Oxford University Press.
- Feenberg, A., Pippin, R., and Webel, C. (1987). *Marcuse: Critical Theory and the Promise of Utopia*. South Hadley, MA: Bergin & Garvey Press.
- Fraser, N. (1993). Rethinking the public sphere: A contribution to the critique of actually existing democracy. In C. Calhoun (Ed.) *Habermas and the public sphere* (pp. 109-142). Cambridge, MA: The MIT Press.
- Gellner, E. (1994). *Conditions of liberty: Civil society and its rivals*. London: Penguin.

- Giddens, A. (1973). *Capitalism and modern social theory*. Cambridge, MA: Cambridge University Press.
- Giner, S. (1995). Civil society and its future. In J. Hall (Ed.), *Civil society: Theory, history, comparison* (pp.78-101). Cambridge: Polity Press.
- Gitlin, T. (1998). Public sphere or sphericules? In T. Liebes & J. Curran (Eds.), *Media, ritual and identity* (pp. 168-174). London: Routledge.
- Grossman, L. (1995). *The electronic republic*. New York, NY: Viking.
- Hacker, K. L. and J. v. Dijk, Eds. (2000). *Digital Democracy: Issues of Theory and Practice*. Thousand Oaks, CA, Sage Publications.
- Hall, J. (1998). Nature of civil society. In *Society* 55(1), 32-41.
- Hamelink, C. (2000). *The ethics of cyberspace*. London: Sage Publications.
- Hauben, M. & Hauben, R. (1997). *Netizens: On the History and Impact of Usenet and the Internet*. Los Alamitos, CA: IEEE Computer Society Press.
- Heater, D. (1990). *Citizenship: The civic ideal in world history, politics and education*. Cambridge: Polity Press.
- Heidegger, M. (1927). J. Macquarrie & E. Robinson (trans.). (1962). *Being and time*. New York, NY: Harper.
- Henderson, D. (1999). *The Multilateral Agreement: A story and its lessons*. Wellington: New Zealand Business Roundtable.
- Hill, K. & Hughes, J. (1998). *Cyberpolitics: Citizen activism in the age of Internet*. Lanham, MD: Rowman & Littlefield.
- Himanen, P. (2001). *The hacker ethic: A radical approach to the philosophy of business*. New York, NY: Random House.
- Hoff, J., Horrocks, I. & Tops, P. (2000). Democratic governance and new technology: Technologically mediated innovations in political practice in Western Europe. London: Routledge.
- Huyer, S. (2002). Networks for social knowledge: The anti-NAFTA challenge. In M. Pendakur and R. Harris (Eds.), *Citizenship and participation in the information age* (pp.300-309). Aurora: Garamond Press.
- Hyslop-Margison, E. (2004). Technology, human agency and Dewey's constructivism: Opening democratic spaces in virtual classrooms. In *Australian Journal of Educational technology* 20 (2), 137-148.
- Industry Canada (1998). Speaking notes for the Honourable John Manley, Minister of Industry, Vancouver Board of Trade, Connecting Canadians. Vancouver: Industry Canada.
- John son, R.J, Gregory, D. Pratt, G. & Watts, M. (Eds.) (2002). *The dictionary of human geography*. Malden, MA: Blackwell Publishers Inc.
- Jones, S. (Ed.). (1995). *CyberSociety : computer-mediated communication and community*. Thousand Oaks, CA: Sage Publications.
- Kellner, D. (Vol. Ed.). (2001). *Towards a critical theory of society: Collected papers of Herbert Marcuse: Vol. 2*. New York, NY: Routeledge.
- Kellner, D. (2001)b. Feenberg's Questioning Technology. In *Theory, Culture and Society* 18 (1), 155-162.
- Kellner, D. (Vol. Ed.). (1998). *Technology, war and facism: Collected papers of Hebert Marcuse: Vol. 1*. New York, NY: Routeledge.

- Kellner, D. & Kahn, R. (2003). Internet subcultures and oppositional politics. In D. Muggleton & R. Weinzierl (Eds.), *The post-subcultures reader* (pp. 299-315). London: Berg.
- Kobrin, S. (1998). The MAI and the clash of globalization. *Foreign Policy* 111 (2) 97-109.
- Lemire, M. (2002). Globalization, information society and social movement. In M. Pendakur and R. Harris (Eds.), *Citizenship and participation in the information age* (pp.310-321). Aurora: Garamond Press.
- Levy, S. (1984). *Hackers: Heroes of the computer revolution*. Garden City, NY: Anchor Press/Doubleday.
- Lin, W & Dutton, W. (2003). The 'net' effect in politics: The 'stop the overlay' campaign in Los Angeles. In *Party Politics* 9 (1): 124-136.
- Littlejohn, S. (2002). *Theories of human communication*. Belmont, CA: Wadsworth Thomson Learning.
- Loader, B. (1998). *Cyberspace divide: Equality, agency and policy in the information society*. New York, NY: Routledge.
- Lyon, D. (1999). *Postmodernity*. Minneapolis, MN: University of Minnesota Press.
- Marcuse, H. (1964). *One-dimensional man*. Boston, MA: Beacon Press.
- Margolis, M. & Resnick, D. (2000). *Politics as usual: The cyberspace 'revolution'*. Thousand Oaks, CA: Sage Publications.
- Martinez-Torres, M. (2001). Civil society, the Internet, and the Zapatistas. In *Peace Review* 13 (3),347-355.
- Mattlelart, A. & Mattlelart, M. (1998). *Theories of communication*. London: Sage Publications.
- Maybe, N. (1999). Defending the legacy of Rio: The civil society campaign against the MAI. In S. Picciotto and R. Mayne (Eds.) *Regulating international business: Beyond liberalization* (pp. 60-81). Houndmills: Macmillan Press.
- McAdam, D., McCarthy, J. & Zald, M. (1996). *Comparative perspectives on social movements: Political opportunities, mobilizing structures, and cultural framings*. New York, NY: Cambridge University Press.
- Meikle, G. (2002). *Future active: media activism and the Internet*. New York, NY: Routledge.
- Misa, T. (1988). How machines make history, and how historians (and others) help them to do so. In *Science, Technology and Human Values* 13, 308-31.
- Mumford, L. (1964). Authoritarian and Democratic Technics. *Technology and Culture* , 5, (1): 1-8.
- Mumford, L. (1934). *Technics and civilization*. London: Routledge.
- Murphy, B. (2002). A critical history of the Internet. In G. Elmer (Ed.), *Critical perspectives of the Internet*, pp. 27-45. Lanham, MA: Rowman & Littlefield publishers, Inc.
- Negroponte, N. (1995). *Being Digital*. New York, NY: Knopf.
- Noble, D. (1977). *America by design: Science, technology and the rise of corporate capitalism*. England: Oxford University Press.
- Norris, P. (2002). *Democratic phoenix: Reinventing political activism*. New York, NY: Cambridge University Press.

- Norris, P. (2002)b. Revolution, what revolution? The Internet and U.S. elections, 1992-2000. In E. Kamarck & J. Nye (Eds.), *Governance.com: Democracy in the information age*, pp. 59-80. Washington, DC: Brookings Institution Press.
- O'Neil, K. (2002). Web sites of resistance: Internetworking and civil society. In M. Pendakur and R. Harris (Eds.), *Citizenship and participation in the information age* (pp. 322-334). Aurora: Garamond Press.
- Patten, A. (1996). The republican critique of liberalism. In *British Journal of Political Science*, 26 (1), 25-44.
- Petit, P. (1997). *Republicanism: A theory of freedom and government*. New York, NY: Oxford University Press.
- Polletta, F. (2002). *Freedom is an endless meeting: Democracy in American social movements*. Chicago, IL: University of Chicago Press.
- Postman, N. (1993). *Technopoly*. New York, NY: Vintage Books.
- Putnam, R. (2000). *Bowling alone: The collapse and revival of American communities*. New York, NY: Simon & Schuster.
- Rip, A. & Kemp, R. (1998). Technological change. In S. Rayner and L. Malone (Eds.), *Human choice and climate change, Vol. 2: Resources and technology*, (pp. 327-399). Washington, DC: Battell Press.
- Rheingold, H. (1993). *The virtual community: homesteading on the electronic frontier*. Reading, MA: Addison-Wesley Publishing Co.
- Rheingold, H. (2002) *Smart mobs: The next social revolution*. Cambridge, MA: Perseus.
- Salter, L. Democracy, new social movements and the Internet: a Habermasian analysis. In M. McCaughey & M. Ayers (Eds.), *Cyberactivism: Online activism in theory and practice*, pp.118-143 . New York, NY: Routledge.
- Russell, A. (2001). The Zapatistas and computer-mediated peace. In *Peace Review* 13 (3), 357-363.
- Russell, A. (2001)b. The Zapatistas online: Shifting the discourse of globalization. In *Gazette* 63 (5), 399-413.
- Sclove, R. (1995). *Democracy and technology*. New York, NY: Guilford Press.
- Shade, L. (1994). Computer networking in Canada: From CA*net to CANARIE. *Canadian Journal of Communication* 19 (1).
- Smith, M. R., Marx, L. (1994). *Does technology drive history? The dilemma of technological determinism*. Cambridge, MA: MIT Press.
- Spragens, T. (1999). *Civic liberalism: Reflections on our democratic ideals*. Cumnor Hill, Oxford: Rowman & Littlefield Publishers, Inc.
- Stahler-Sholk, R. (2001). Globalization and social movement resistance: The Zapatista rebellion in Chiapas, Mexico. In *New Political Science* 23 (4), 493-516.
- Sunstein, C. (2001). *Republic.com*. Princeton, NJ: Princeton University Press.
- Tarrow, S. (1994). *Power in movement: Social movements, collective action, and politics*. Cambridge; New York, NY: Cambridge University Press.
- Taylor, L. (1998). *Citizenship, participation and democracy*. London: Macmillan Press.
- Tester, K. (1992). *Civil society*. London: Routledge.
- Thompson, I. (2000). From the question concerning technology to the quest for a democratic technology: Heidegger, Marcuse, Feenberg. In *Inquiry*, 225-238.

- Van Aelst, P. & Walgrave, S. (2002). New media, new movements? The role of the Internet in shaping the 'anti-globalization' movement. In *Information Communication & Society*, 5 (4)
- Van Rooy, A. (2000). *Civil society on tour: Seattle, Washington, Windsor and the world*. Ottawa: The North-South Institute.
<<http://www.nsiins.ca/ensi/research/voices/support/civilsoc.pdf>>
- Vegh, S. (2003). Classifying forms of online activism: The case of cyberprotests against the world bank. In M. McCaughey & M. Ayers (Eds.), *Cyberactivism: Online activism in theory and practice* (pp. 71-95). New York, NY: Routledge.
- Vidal, J. (1999) Anatomy of a very nineties revolution. *Guardian Unlimited* (www.guardian.co.uk/archive) 13 January: unpaginated.
- Walzer, M. (1991). The idea of civil society: A path to social reconstruction. In *Dissent* 38 (2), 293-304.
- Warkentin, C. (2001). *Reshaping world politics: NGOs, the Internet, and global civil society*. Lanham, MD: Rowman & Littlefield publishers
- Weiberg, B. (2000). Mexico's dirty war: Six years after the Zapatista uprising. *Third World Traveler*.
<http://www.thirdworldtraveler.com/Latin_America/MexicosDirtyWar_Zapatistas.html>
- Whillock, R. (2000). Age of reason: The electronic frontier confronts the aims of political persuasion. In A. Albarran & D. Goff (Eds.), *Understanding the Web: Social, political and economic dimensions of the Internet*, pp.165-191. Ames, IO: Iowa State University Press.
- Wilhelm, A. (2000). *Democracy in the digital age: Challenges to political life in cyberspace*. New York, NY: Routledge.
- Wilson, J. (1973). *Introduction to social movements*. New York, NY: Basic Books.
- Wolin, R. (2001). *Heidegger's children*. Princeton, NJ: Princeton University Press.